Coercive Warfare and Gradual Escalation: Confronting the Bogeyman

A Monograph
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Abstract

COERCIVE WARFARE AND GRADUAL ESCALATION: CONFRONTING THE BOGEYMAN by MAJ Steven G. Gray, USAF, 69 pages.

This monograph answers the question of whether operational air commanders have the necessary doctrinal tools to plan for effective airpower employment in gradually escalated, coercive warfare. It concludes that current Air Force doctrine does not adequately address coercive warfare. Given the question and answer, several secondary questions flow from them and are addressed in successive chapters

1) What do the terms gradual escalation and coercive warfare mean and how do they differ from rapid, decisive operations?
2) Historically, how has airpower been employed in gradually escalated conflicts?
3) What are the needed changes in current Air Force doctrine to address the planning and employment of airpower in a gradually escalated, coercive conflict?

The main reason for the writing of this paper is to fill a gap in U.S. Air Force doctrine regarding coercive warfare. Accordingly, this monograph exclusively addresses U.S. Air Force doctrine and offers a doctrinal model for planning coercive air campaigns. It is beyond the scope of this paper to address Joint U.S. or NATO doctrine.

The monograph uses two recent Balkan Air Campaigns, Operation Deliberate Force over Bosnia and Operation Allied Force over Kosovo, as historical examples of coercive conflicts. Both operations involved a gradual escalation of applied force to coerce the Serbians to accept NATO demands. In both cases and exclusively in Kosovo, airpower was the key component of this applied force.

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ACRONYMS

AFDD	Air Force Doctrine Document
CAOC	Combined Air Operations Center
COG	Center of Gravity
CONPLAN	Concept of Operations Plan
GPS	Global Positioning System
IADS	Integrated Air Defense System
JAOP	Joint Air Operations Plan
JFACC	Joint Force Air Component Commander
LOC	Line of Communication
NAC	North Atlantic Council
NATO	North Atlantic Treaty Organization
OAF	Operation Allied Force
OAS	Offensive Air Support
ODF	Operation Deliberate Force
PGM's	Precision Guided Munitions
SACEUR	Supreme Allied Commander in Europe

CHAPTER 1

INTRODUCTION

> …political, economic, or social realities may dictate strategic and operational approaches that depart from accepted doctrine when leaders develop our national security strategy or develop plans for particular contingencies. When this happens, military commanders should delineate for political leaders the military consequences of those adaptations. However, because war is "an instrument of power of policy," military commanders must ensure that policy governs the employment of military power and be prepared to adapt operations accordingly.
>
> Air Force Doctrine Document (AFDD) 1

Background

Since the end of Operation Allied Force in June of 1999, an on-going, outspoken debate has raged between the principal commanders, General (ret.) Clark, USA and Lt Gen (ret.) Short, USAF over how the campaign was conducted. The centerpiece of this argument rests around the two closely related concepts of gradual escalation and coercive warfare. Lt Gen Short, the air commander, in particular railed against such policies as being incompatible with the sound military doctrine of decisive engagement. While this is certainly a valid military position, his argument does not account for the political realities associated with alliances and coalitions as well as the lessons of history. Outside influences have always constrained the makers and executors of strategy. The issue in question is not whether decisive strategy is better than coercive strategy, but whether the U.S. Air Force can execute both strategies effectively.

During the School of Advanced Airpower Studies academic year 1999 – 2000, Major Peter Huggins, USAF, wrote an in-depth thesis entitled "Airpower and Gradual Escalation: Reconsidering the Conventional Wisdom." In his thesis, he provides a historical foundation for the use of airpower in gradually escalated conflicts as well as makes the case that future airpower operations will be performed in this manner. What his thesis did not address, nor was it designed

to, were the doctrinal considerations for planning and fighting an effective, gradually escalated air campaign.[1] This research monograph will address those considerations.

Alternatively, this monograph is not an attempt to justify the strategy of gradual escalation over decisive engagement. To the military mind, decisively defeating an enemy as opposed to incrementally coercing him, allows for quicker conflict resolution on favorable terms. In particular, gradual escalation is anathema to Air Force leaders who see in it sickening similarities to the Vietnam conflict. However, the political realities of post-modern conflict oftentimes dictate a more coercive rather than decisive military option. This is particularly true of alliance warfare. Again, the emphasis of this monograph is not to argue for a policy of gradual escalation but rather to present a doctrinal model for planners faced with creating an effective air campaign plan under such a policy.

The majority of literature to date on this topic primarily concerns the causes and conditions of gradual escalation as well as discussing historical examples. What is not adequately addressed, particularly in military doctrine and specifically in Air Force doctrine, are the considerations for planning and fighting such a conflict. This void in doctrine means that air planners are not fully equipped to perform their job. Arguing away the gradual escalation course of action in favor of the more preferable strategy of decisive engagement is ignoring the historical use of airpower as well as scorning political reality.[2] In effect, it means that the Air Force is providing Combatant Commanders with incomplete airpower options.

This monograph aims to fill this gap in U.S. Air Force doctrine. In order to do so it will answer the question -- Do operational air commanders have the doctrinal tools necessary to plan

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[1] Peter W. Huggins., "Airpower and Gradual Escalation: Reconsidering the Conventional Wisdom." (Thesis, School of Advanced Airpower Studies, Air University, 2000).

[2] Since WWII, the U.S. Air Force has been politically constrained in every major campaign it has conducted. Vietnam provides the most obvious example, however constraints existed in Korea, Desert Storm and Kosovo. In Korea, the inability to bomb or fight north of the Yalu River presented a major obstacle to the theories and application of doctrinal strategic bombardment. During the Gulf war, domestic policies precluded direct attacks on the leadership of Iraq until late in the war. In Kosovo, the targeting

for and employ effective airpower in gradually escalated, coercive warfare? Given this question several secondary questions flow from it and are addressed in successive chapters.

1. What do the terms gradual escalation and coercive warfare mean and how do they differ from rapid, decisive operations?
2. Historically, how has airpower been employed in gradually escalated conflicts?
3. What are the needed changes in current Air Force doctrine to address the planning and employment of airpower in a gradually escalated, coercive conflict?

In framing the answer to the research question, this monograph makes two key assumptions. First, the U.S. will continue to fight in wars of coercion in which the political realities of international diplomacy, alliances, media influence, and domestic pressures constrain the decisive application of airpower. While decisive engagement is always militarily preferable over gradual escalation, the political environment in which conflict occurs is often a constraint. Secondly, that U.S. Air Force doctrine with its overwhelming focus on decisive victory cannot be counted on to meet the needs of future warfighters operating under the constraints listed in the first assumption. While AFDD 1 identifies the need for commanders to adapt doctrine to political reality, it does not address how to effect this adaptation. [3] This assumption challenges the belief that training for the hardest missions equips warfighters to accomplish every mission. It is an argument found in the U.S. Army's belief that training for combat is more arduous than peacekeeping and therefore a higher not a different standard is applicable across the spectrum of conflict.

Likewise, there are limitations as to what this monograph covers. Significantly, all information comes from unclassified documents, speeches, journals, theses and books. However, the key limitation placed on this paper is that it addresses only Air Force doctrine. This should not be construed as an argument for an airpower only strategy. The author recognizes that

---

process that gave veto rights to all NATO voting members significantly altered the U.S. air campaign, to include mission cancellations of aircraft enroute to their targets.

[3] AFDD 2 and AFDD 2-1 both emphasize "dominant and decisive theater-level effects by striking directly at enemy centers of gravity" (AFDD 2 page 9). Conversely, on page 37, AFDD 2-1 mentions "A protracted campaign rarely serves strategic purposes well." Both documents are replete with references to decisive, dominant operations while scarcely addressing constraints on employment.

airpower is only one component of military power and an even smaller component of U.S. national power. However, to address all the elements of U.S. power and the multi-variable and shifting relationships within that power is well beyond the scope of this monograph.

In structuring the monograph, the arrangement of the chapters presented a vexing problem. Should a coercive doctrinal model be constructed before the historical chapters or after? If before, the temptation is in viewing history through a self-colored lens. If the model is presented later, the problem lies in whether the lessons drawn from the past are the correct ones for the future. If they are not, the model is based on faulty reasoning and produces faulty assumptions. In the end, the latter path proved preferable mainly in an effort to avoid the pitfalls of the former.

The framework of the monograph begins with the study of two recent air campaigns, providing both positive and negative lessons concerning the employment of airpower in a gradually escalated conflict. The doctrinal chapter follows with an analysis of current Air Force doctrine regarding these lessons and seeks to highlight any gaps. The next chapter builds a theoretical model for use in incorporating the historical lessons learned as well as addressing the doctrinal shortfalls presented in earlier chapters. Finally, the conclusion chapter presents recommendations on where and how to apply this model within U.S. Air Force doctrine.

Terminology

However, before beginning, a common understanding of terminology is first necessary to enhance the discussion. For this monograph, two concepts, three strategies and some theoretical terminology need definition. The two concepts of gradual escalation and coercion are closely related to one another while the three strategies are some of the current options available to air component commanders. The theoretical terminology discussion derives from Major John Kimminau's monograph concerning prospect theory and airpower, particularly in coercive conflicts.

Thomas Schelling, a Harvard economics professor, first introduced the concept of gradual escalation in his 1966 book *Arms and Influence*, in reference to the Vietnam War. Schelling though, did not use the term gradual escalation, but presented his ideas as the "art of commitment" and the "manipulation of risk." While the term "gradual escalation" is not derived from Schelling, it is the embodiment of his concepts. Scott Cooper, in an article for *Policy Review*, used the definition from the book *The Pentagon Papers.* It is as follows.

> **Gradual Escalation** – a gradual, orchestrated, acceleration of tempo measured in terms of frequency, size, number and/or geographic location…An upward trend in any or all of these forms of intensity will convey signals which, in combination, should present to the (enemy) leaders a vision of inevitable, ultimate destruction if they do not change their ways.[4]

The key phrases within this definition are "a gradual, orchestrated acceleration of tempo," and "convey signals." Gradual Escalation is intended to provide a signal to the enemy over time of steady and increasing pressure designed to give the opponent the opportunity to cease or reverse his actions before facing decisive defeat. It is essentially, a threat turned ever increasingly to action.

Tied closely to the concept of gradual escalation is the term coercion and more descriptively, coercive warfare. The definition of coercion is:

> **Coercion** - the act or practice of forcing an opponent to think or act in a given manner by pressure, force, domination, control or intimidation.[5]

In other words, it is the imposition of one's will (coercer) on another (coercee) through the threat of or use of force. Schelling further breaks down coercion into deterrence and compellence. **Deterrence** is coercion of an opponent by threat of future action. It is indefinite in timing and designed to prevent an opponent from taking future action, action in which he is currently not engaged.

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[4] The word enemy has been substituted by the author for the "Democratic Republic of Vietnam" (North Vietnam) government, which was in the original. This is in order to use the definition in the broadest sense. Scott A.Cooper, "The Politics of Airstrikes." *Policy Review*. Available online at http://policyreview.org/jun01/cooper_print.html. 5.

Compellence, a term coined by Schelling, is defined as the threat of force or actual force used to induce an opponent *to cease or reverse an action he has already taken.*[6] Schelling ties compellent coercion to the concept of gradual escalation when he writes, "The forcible and the coercive are both present in a campaign that could reach its goal against resistance, and would be worth the cost, but whose cost is nevertheless high enough so that one hopes to induce compliance, or to deter resistance, by making evident the intent to proceed. Forcible action…is limited to what can be accomplished without enemy collaboration; compellent threats can try to induce more affirmative action, including the exercise of authority by an enemy to bring about the desired results."[7]

Linking the definition of coercion to gradual escalation produces the term coercive warfare. Simply stated, **coercive warfare** is an attempt by one entity to compel another entity, through threat of or use of physical force, to accept its will in an issue (*author's definition*). It differs from decisive warfare in that the end state is not the defeat or destruction of the opposing entity, merely the acceptance of a condition or conditions at the minimum cost to the coercer. For clarification, this monograph is concerned exclusively with the compellence side of coercion and uses the terms coercive warfare and gradual escalation almost synonymously. Additionally, this monograph speaks exclusively to coercive warfare from an airman's perspective and thus the use of the term coercive warfare in this paper implies the use of airpower to coerce an opponent.

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[5] Paraphrased from *The American Heritage Dictionary*, Second College Edition definitions of coerce and coercion.

[6] This definition is paraphrased from Schelling's book. (*emphasis added*) Alexander George, a Rand researcher and Professor Emeritus at Stanford University, further breaks down coercive compellence between *defensive* - dissuading an opponent to cease or reverse an action already taken and, *offensive* - compelling him to give up something of value which George designates as "blackmail strategy." This paper concerns itself exclusively with the defensive use of coercion. Alexander L. George, and William E. Simons, editors. *The Limits of CoerciveDiplomacy.* 2d. ed. Boulder, Colo.: Westport Press, 1994. 5.

[7] Thomas C.Schelling, *Arms and Influence.* New Haven, Conn.: Yale University Press, 1966. 80.

Having discussed and linked the concepts of gradual escalation, coercion and coercive warfare, it is now prudent to define three strategies used by airmen in applying airpower to meet national political/military objectives. These strategies, defined and classified by Robert Pape in his book, *Bombing to Win*, are listed as denial, punishment and decapitation. Pape bases his definitions on the historical uses of air power from both a theoretical as well as a factual perspective. For ease of purpose and clarity, this monograph uses his definitions exclusively. They are as follows:

> **Punishment** – attempts to inflict enough pain on enemy civilians to overwhelm their territorial interests in the dispute and to cause either the government to concede or the population to revolt against the government. Air power can impose terrible costs on civilians by saturation bombing of population centers, as occurred in World War II. Or it can cause pain indirectly by wrecking the civilian economy. Destroying electric power grids, oil refineries, water and sewer systems, and domestic transportation can substantially lower a nation's ability[8]…(infrastructure attack is the primary means by which U.S. air power executes a punishment strategy, both historically and doctrinally today)
>
> **Denial** – entails smashing enemy military forces, weakening them to the point where friendly ground forces can seize disputed territories without suffering unacceptable losses. Denial strategies seek to thwart the enemy's military strategy for taking or holding its territorial objectives, compelling concessions to avoid futile expenditure of further resources. Accordingly, denial campaigns generally center on destruction of arms manufacturing, interdiction of supplies from homefront to battlefront, disruption of movement and communication in the theater, and attrition of fielded forces.[9]
>
> **Decapitation** – strikes against key leadership and telecommunication facilities. The main assumption is that these targets are a modern state's Achilles' heel. Regardless of the strength of a state's fielded forces or military-industrial capacity, if the leadership is knocked out, the whole house of cards comes down. These counterleadership raids also cause little collateral damage if intelligence about the targets is right.[10] (In this strategy, it is not necessary to kill an opposing leader. The intent is to isolate the leadership, significantly reducing the leadership's span of control.)

Pape lists the U.S. strategic bombing campaign of World War II as a typical punishment strategy while the various interdiction campaigns used during the Korean War serve as examples of denial

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[8] Robert A. Pape, *Bombing to Win: Air Power and Coercion in War.* Ithaca, N.Y.: Cornell University Press, 1996. 59.
[9] Ibid, 69.
[10] Ibid, 79.

campaigns. Lastly, the U.S. attempt to isolate Saddam Hussein from his fielded forces and political machine during Operation Desert Storm is a prime example of a decapitation strategy.

The final terminology clarification involves the domain of gains and domain of losses presented in the Prospect Theory of bounded rationality. Essentially, it is a theory attempting to group multiple explanations of "systematic anomalies in decisionmaking."[11] In his 1998 thesis, presented to the School of Advanced Airpower Studies at Maxwell AFB, Major Jon Kimminau outlined Prospect Theory and its application to coercive air warfare. Of particular use is his discussion of the domain of gains and loss. Essentially, the **domain of gains** puts people or leaders in a situation where they stand to gain something more than the status quo at the start of the endeavor. The **domain of losses** places people or leaders in a situation where they stand to lose more than the status quo from their starting point. In coercive diplomacy and warfare, this involves such things as diplomatic standing, territorial gains or economic viability. Key here, is the reference point of the leader from the status quo at the start of the conflict, not from his current position at any given time.

In discussing coercive warfare, the utility of these concepts involves the associated propensity for risk. [12] In the domain of gains, people tend to be risk averse while in the domain of losses they tend to accept risk. A simple illustration from Major Kimminau's thesis serves to highlight this issue:

> For example, given a choice between a sure gain of $3000 and a 80% chance to gain $4000, 80% of subjects chose the certain gain of $3000. In contrast, in the domain of loss, given a choice between a sure loss of $3000 and a 80% chance of losing $4000 (with a 20% chance of losing nothing), 92% of subjects chose the risky option. [13]

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[11] Jon A. Kimminau, "The Psychology of Coercion: Merging Airpower Theory and Prospect Theory." Thesis, School of Advanced Airpower Studies, Air University, Maxwell AFB, Al.: 1998. 11.

[12] Pape also includes a fourth strategy that he labels "Risk". Essentially, it is synonymous with the term gradual escalation. It is the gradual escalation of force using any of the three strategies listed above. In as much as "risk" is simply one of, or a combination of the other three strategies applied in a graduated manner, its usefulness as a distinct strategy is limited.

[13] Kimminau, 13. Kimminau's example comes from an article by N.S. Fagley and Paul Miller entitled "Framing effects and arenas of choice: Your money or your life?" in the publication *Organizational Behavior and Human Decision Processes*.

This concept is necessary as a reference point for the historical discussions presented in Chapters two and three.

Summary

With the tragic events of 11 September 2001 still fresh during the researching and writing of this monograph, the monograph topic seems to have both lost and gained relevance. As of this writing, the U.S. enjoys widespread support of it aggressive policies against nations and trans-national entities sponsoring terrorism. This support allows the U.S led alliance to dictate its strategy with considerably less international influence than in other recent conflicts involving the U.S. However, as time passes, indeed even as of January 2002, the cohesion among the nations and regions of the world shows signs of stress. Both international and domestic tensions will once again combine to dictate more stringent political constraints on U.S military action. Hopefully, during this relative respite in which U.S. military actions are not as rigidly constrained, the U.S. Air Force can wrestle with the issue of coercion warfare and be doctrinally better prepared for its next instance of use.

CHAPTER 2

AIRPOWER AS AN EQUALIZER: OPERATION DELIBERATE FORCE

> Some threats are inherently persuasive, some have to be made persuasive, and some are bound to look like bluffs.
>
> Thomas Schelling, *Arms and Influence*

Introduction

Operations Deliberate Force and Dead Eye began on 29 August 1995, and ended three weeks later on 20 September 1995. It occurred as a response to repeated Serbian violations of UN mandates concerning safe areas and exclusion zones within Bosnia, which culminated with the 28 August 1995 mortar attack on Sarajevo. Operation Dead Eye was "an air protection plan to disrupt the integrated air defense system in Bosnia and thus reduce the risk to NATO aircraft flying in Bosnia-Herzegovina."[14] Designed as a graduated response to Serb infractions of UN mandates, Operation Deliberate Force was a punitive as well as coercive air campaign.[15] The end state was the halting of Serbian attacks and enforcement of the UN mandates (coercive) as well as the reduction of the Bosnian Serb military capabilities (punitive). The following objectives and targets, originally taken from the US European Command homepage, relate the military objectives and targeting strategy for the UN and NATO.

Dead Eye/Deliberate Force

Situation – Serbian non-compliance through continued Serbian aggression in the face of UN/NATO mandates and warnings. Serbian mortar attack kills 38 in Sarajevo, triggering Operations Dead Eye and Deliberate Force.

Objectives - 1. Disrupt the IADS in Bosnia (Operation Dead Eye) to reduce the risk to NATO aircraft in Deliberate Force

[14] "Operation Deliberate Force Fact Sheet," Allied Forces Southern Europe, Available online http://www.fas.org/man/dod-101/ops/docs/DeliberateForceFactSheet.htm, Accessed 21 Feb 2002. 1.
[15] Ibid, 2.

2. Reduce the Bosnian Serb's military capability to threaten or attack safe areas and UN Forces.

Targets – "Enemy IADS, fielded forces/heavy weapons, command and control facilities, direct and essential military support facilities, and supporting infrastructure/lines of communication."[16]

Much has been written concerning Operation Deliberate Force, from the political/ strategic level to the tactical echelon. However, this chapter focuses on two particular points from this conflict. They are: the dual key command and control relationship between the UN and NATO which introduced considerable political constraint and risk into the operation; and the use of a purely denial strategy. The command structure, with its inherent constraints and risks, significantly influenced the choice of the denial strategy.

Command and Control as a Constraint

One of the key constraints affecting Operation Deliberate Force came from the cumbersome command structure in-place at the start of the air campaign. Called a dual-key policy, it worked in a similar fashion to the nuclear surety measure involving the turning of two keys, each by separate individuals, in order to effect a nuclear launch. For the release of air strikes in Bosnia, one key was under the control of the UN and the other was under the control of NATO. Figure 1 on the next page graphically portrays this command arrangement. The UN key was initially in the hands of the UN Secretary General and his special representative, however, this proved so unwieldy that it was changed at the London conference of 21 – 25 July 1995. The UN then delegated the authority for strikes to the Force Commander of UN Peace Forces.[17]

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[16] William W. Francis, II, "Coercive Air Strategy in Post-Cold War Peace Operations," Thesis, School of Advanced Airpower Studies, Air University, Maxwell AFB, Alabama: 1999. 31. Maj. Francis lists his source online at http://www.eucom.mil/operations/af. accessed 31 March 1999 and is no longer available.

[17] Owens, Robert C. Col "Balkans Air Campaign Study, pt. 1" 15, 17. Admiral Smith related the frustration NATO commanders experienced with the dual-key policy, reaching its peak in the summer of 1995, "when the UN peacekeepers 'protecting' the city of Srebrenica called desperately for CAS. NATO jets were ready for attack within minutes, but the UN refused to turn its 'key' for two days…" The city fell to the Serbs.

The NATO key resided in the hands of Admiral Smith as CINCSOUTH and, for defensive CAS missions was delegated to the CAOC director.

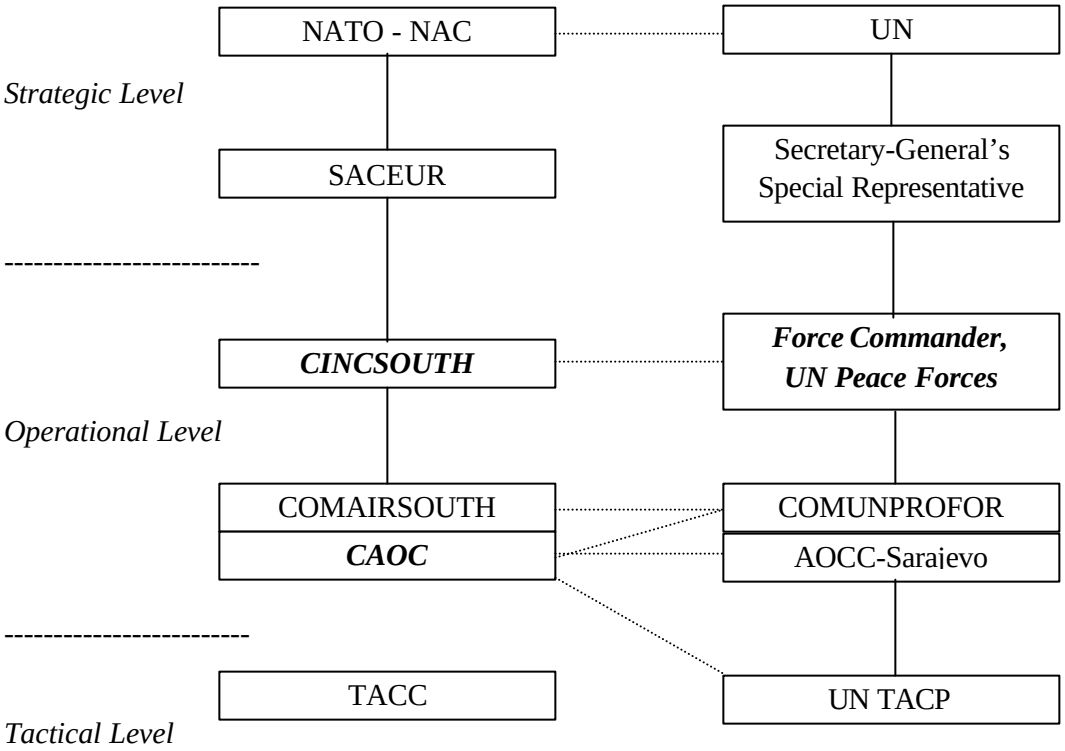

Fig. 1

——— Command Relationship
..... Coordinating Relationship

BOLD ITALICS represents dual key for strike authority

AOCC – Air Operations Control Center
CAOC – Combined Air Operations Center
TACC – Tactical Air Control Center
TACP – Tactical Air Control Party (small ground unit used to control air strikes)[18]

[18] Figure adapted from a similar figure from Todd P. Harmer, "Enhancing the Operational Art: The Influence of the Information Environment on the Command-And-Control of Airpower," Thesis, School of Advanced Airpower Studies, Air University, Maxwell AFB, Alabama: 2000. 62

This command arrangement occurred for two reasons. The first reason resides in the difference of how the UN and NATO framed the conflict. Col Robert Owens, in his summation of the Balkan Air Campaign Study expressed this distinction as, "The real tension came from what proved to be the UN's greater reluctance, at least compared to the inclination of involved air commanders, actually to act on ROE. 'NATO,' Major Reed concluded in his study, 'would always view the use of force in terms of compelling the Bosnian Serbs…[while] the UN …viewed force in a much more limited context of self-defense.'"[19] The UN attempt to create safe areas for the security of civilians within Bosnia was not about taking sides in a political conflict but rather about "ameliorating suffering and facilitating a cease-fire." It revolved around the contextual framing that the conflict was the result of long standing ethnic strife. NATO, and America in particular, framed the conflict as a political manipulation. Thus, in Owens words, "it had culprits."[20] It follows that if there are villains, then they could be coerced, in this case by changing the balance of military power through air strikes. These contextual differences amongst the UN/NATO coalition created significant tension on the use of airpower in the Balkans.[21]

The second reason for the dual-key policy was its use as a control measure. Essentially, the dual-key arrangement was a control measure put in place by the UN in an attempt to control the Americans in the Balkans. Colonel Owens expressed the UN concern when he wrote, "Part of the dual-key arrangement was about controlling a powerful and politically sensitive 'weapon' in the coalition's arsenal, and part of it was about controlling the holders of that weapon."[22] He further states that, "The dual-key arrangement thus was an overt effort to counterbalance UN and NATO control over air operations. As such, it indicated at least a corporate presumption among the member states of each organization that some possibility of misunderstanding or

[19] Owens, Robert C. Col "Balkans Air Campaign Study, pt. 1" 14.
[20] Ibid, 9.
[21] Ibid, 9. In part one of the BACS summation, Owens spends quite some time addressing the differences in context, which are summarized in the above paragraph.

irresponsibility existed in the way one organization or the other might interpret the standing ROE and the immediate circumstances of a proposed strike."[23] Thus the UN, with NATO's compliance, used command and control as a key constraint on the use of force in the Balkans.

Denial Strategy

Essentially, the dual-key policy introduced risk in the form of often uncertain political resolve regarding air strikes. In order to mitigate this risk, NATO commanders kept the targeting process under strict control.[24] Illustrating this point, Major Peter Hunt, in his thesis concerning Operation Deliberate Force, wrote:

> Because of the tightly controlled airpower targeting in the Balkans, CAOC planners devised standard force packages that could respond quickly to changing political guidance. Instead of determining the required airpower based on the target objective and threat assessment, planners built generic packages whose target often changed while the aircrews maintained a ground alert posture. When targets changed, allied aircrews in these so-called "cookie cutter" packages had minimal time for target study and mission coordination, particularly since the aircrews were located at different bases.[25]

Accordingly, force application assumed tactical risk in the form of less than optimal strike packages in an effort to alleviate strategic risk.

With the dual-key constraint in effect, particularly the piece regarding the UN's contextual framework and the associated risk involved, the choices for a targeting strategy narrowed considerably. The UN's focus on peace making and self-protection, combined with authorization control for strikes, did not allow targeting options outside of fielded forces or their logistical infrastructure. The three targeting options developed by AIRSOUTH for Operation Deliberate Force clearly illustrated this focus. Writes Owen:

> This decision statement spelled out three targeting options for offensive air strikes. Option one provided for OAS strikes of limited duration and scope against military forces

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[22] Ibid, 14. Additionally, Owens relates that the "main concern centered around the 'Americanization' of the intervention's air option." Operations Deny Flight and Deliberate force were commanded by Americans, acting as NATO commanders, and were primarily executed by American airpower.
[23] Owens, Robert C. Col "Balkans Air Campaign Study, pt. 1" 14.
[24] Col Robert C. Owen, ed. USAF *Deliberate Force: A Case Study in Effective Air Campaignin*g, Maxwell AFB, Ala.: Air University Press, 2000. 487.
[25] Peter C Hunt,. "Coalition Warfare: Considerations for the Air Component Commander," Thesis, School of Advanced Airpower Studies, Air University, Maxwell Air Force Base, Alabama. 1996. 31

> and weapon systems directly violating UN resolutions or attacking UN peace forces or other personnel. Option two targets were mechanisms for lifting sieges. Their focus remained on military force and supporting elements, but their scope expanded to include targets throughout the immediate environs of a besieged safe area. Option three targets marked out a broader campaign against targets outside the immediate area of a siege. Over the coming months, AFSOUTH made marginal adjustments to this basic target list, but the three-option categorization remained in effect.[26]

Thus, all three targeting options focused on fielded forces or their associated infrastructures; clearly a denial strategy.

In application, this denial strategy is evidenced by airpower striking 338 individual targets within forty-eight target complexes between the period 29 August and 14 September 1995.[27] These forty-eight target complexes included ammunition depots, bridges along key LOC's, IADS targets, command bunkers and artillery positions.[28] All of the targets were within Bosnia and were designed to both defend the safe areas as well as coerce the Bosnian Serbs. Additionally, in an effort to alleviate the political concerns of collateral damage and civilian casualties, Lt Gen Ryan personally selected each target.[29]

On 14 September 1995, NATO and the UN ceased air strikes after the warring factions agreed to the following terms:

- Cease all offensive operations within the Sarajevo TEZ (total exclusion zone)
- Remove heavy weapons from the TEZ within 144 hours
- Unimpeded road access to Sarajevo
- Sarajevo Airport opened for unrestricted use
- BIH (Bosnian Army) and BSA (Bosnian Serb Army) commanders meet to formalize a cessation of hostilities agreement[30]

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[26] Owens, Robert C. Col "Balkans Air Campaign Study, pt. 1" 13.
[27] "Operation Deliberate Force Fact Sheet," Allied Forces Southern Europe, Available online http://www.fas.org/man/dod-101/ops/docs/DeliberateForceFactSheet.htm. Accessed 21 Feb 2002. 7.
[28] Ibid, 4 – 6.
[29] John A. Tirpak, "Deliberate Force," *Air Force Magazine*, vol 80, no.10 (October 1997): 43.
[30] Ibid. 6.

Undoubtedly, the choice of a denial strategy worked to coerce the Bosnian Serbs to cease their attacks on the UN safe areas. Airpower proved itself capable of coercing an opponent. However, airpower did not do it alone. In Operation Deliberate Force, a key ingredient for success was the synergy created through the combination of airpower and ground forces. The ground forces of the UN, the Bosnian Muslims and the Croats, all forced the Bosnian Serbs to concentrate as well as resupply. Without ground forces, the ability to apply coercive pressure was doubtful.

Specifically, the Croats August offensive proved hugely successful in driving the Serbs out of Croatia while posturing the Croat Army for continued operations into Bosnia.[31] Additionally, the might of the confederation of Bosnian Muslims and Croats had expanded. When Operation Deliberate Force commenced, the confederation "outnumbered the Serbs as much as six to one in manpower (counting reserves), two to one in tanks, and almost two to one in heavy artillery."[32] Certainly, the offensive, combined with overwhelming opposition superiority, forced the Serbs to concentrate their forces making them much more viable to air attack. What is peculiar about this relationship though, is that NATO and the UN did not operate in conjunction with the confederation. It was truly a symbiotic relationship.

Summary

This chapter emphasized two major lessons regarding coercive warfare and Operation Deliberate Force. The first lesson is that the coalition involving the UN and NATO introduced significant constraints and risk in relation to the use of airpower.[33] Additionally, because this coalition was unprecedented, doctrine for dealing with these constraints and risk was non-existent. Col Owens writes, "Notably, established doctrines were largely silent on how airmen could reconcile, in their plans and target lists, the conflicting objectives and restraints that likely

[31] Michael O. Beale, "Bombs Over Bosnia: The Role of Airpower in Bosnia-Herzegovina," Thesis, School of Advanced Airpower Studies, Air University, Maxwell Air Force Base, Alabama: 1996. 56.
[32] Ibid.
[33] Owens writes, "The political sensitivity of the airpower issue also influenced DENY FLIGHT planning activities. Throughout the operation, Generals Ashy and Ryan took pains to ensure that their planning

would crop up between two powerful organizations in a peacemaking situation in which at least one combatant did not want to make peace. Thus, addressing one of the principal corollary research questions of the BACS (Balkans Air Campaign Study), McCrabb concluded that "the question of whether these planners referred to the existing body of doctrine, or just 'winged it,' is largely moot-there was almost nothing for them to refer to."[34] As chapter four of this monograph points out, Air Force doctrine still has not filled this gap.

The second significant lesson is that a classic denial strategy worked.[35] Major Michael Beale, in his thesis on the role of airpower in Bosnia, relates that this occurred because "It was the cumulative effects of a combined ground offensive, economic and political isolation, and the Serb's inability to respond to a joint air/ground operation that provided the incentive for the Bosnian Serbs to capitulate.[36] Arguably, the presence of an active ground force was the key component for the success of a denial strategy. This robust ground force would be noticeably absent during Operation Allied Force almost four years later.

One last point, relating directly to Operation Allied Force, is that the regional Serbian leader, Slobodan Milosevic, operated in the domain of gains regarding Bosnia. Essentially, if the Bosnian Serbs won the conflict, Milosevic stood to gain influence and potential territory. If however, the Bosnian Serbs lost the conflict, Milosevic's status quo power base remained constant. This was especially true after he publicly ceased to back the Bosnian Serbs.[37] It may even explain why he chose to withdraw his support. In Kosovo though, the opposite would be true, Milosevic would be operating in the domain of losses.

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efforts did not undermine the confidence of NATO and UN political leaders in the professionalism and self-control of their command."

[34] Owens, Robert C. Col "Balkans Air Campaign Study, pt. 1" 10. McCrabb was one of the researchers for the BACS.

[35] Col Robert C. Owen, ed. USAF *Deliberate Force: A Case Study in Effective Air Campaignin*g, Maxwell AFB, Ala.: Air University Press, 2000. 487.

[36] Michael O. Beale, "Bombs Over Bosnia: The Role of Airpower in Bosnia-Herzegovina," 73.

[37] Ibid, 62 – 63.

CHAPTER 3

"THIS IS NOT INSTANT THUNDER, IT'S MORE LIKE CONSTANT DRIZZLE"[38]: OPERATION ALLIED FORCE LESSONS LEARNED

He who fears not death fears not a threat.

Corneille, *The Count, in El Cid*

Holbrooke had said months earlier that the West had learned lessons from Bosnia. It remained to be seen what, if anything, Milosevic had learned.

"The Kosovo Campaign: Aerospace Power Made it Work"

Introduction

Operation Allied Force (OAF) lasted from 24 March 1999 until 9 June 1999. In a seventy-eight day air campaign, NATO air forces attacked the Serbian forces of Slobodan Milosevic both within Kosovo and within Serbia proper. At the start of the air campaign, aircraft from thirteen of the nineteen NATO nations were participants, with the U.S. providing 112 of the 214 total strike aircraft.[39] By the end of the operation, 900 NATO aircraft flew over 38,000 sorties. From aircraft numbers alone it is clear that the conduct of Operation Allied Force occurred in an escalated manner. All of the aircraft involved were available to NATO at the start of the campaign. However, as we shall see, for political reasons they were not applied decisively at the initiation of hostilities.

On the opening night of the bombing, President Clinton listed three objectives for the operation. They were: (1) "to deter an even bloodier offensive against innocent civilians in Kosovo," (2) "if necessary, to seriously damage the Serbian military's capacity to harm the people of Kosovo," and (3) "to demonstrate the seriousness of NATO's purpose so that the Serbian leaders understand the imperative of reversing course."[40] NATO broadened these

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[38] Instant Thunder was the name of Desert Storm's Air Campaign. The quote is attributed to an unnamed USAF general involved in Operation Allied Force. Cooper, 3.

[39] Rebecca Grant, *The Kosovo Campaign: Aerospace Power Made it Wor*k. Arlington, VA. The Air Force Association. (September 1999): 8.

[40] Ivo H. Daalder, and Michael O'Hanlon. "Unlearning the Lessons of Kosovo." *Foreign Policy*, Fall 1999. Available online at http://www.brook.edu/views/articles/daalder/19990920FP.htm 2.

objectives, listing five conditions that Milosevic must meet in order for the air campaign to cease. At the midpoint of the war, during a meeting of the North Atlantic Council (NAC) in Washington, the NATO heads of state reaffirmed the following political conditions:

1. Ensure a verifiable stop to all military action and the immediate ending of violence and repression in Kosovo.
2. Withdraw from Kosovo his military, police and para-military forces.
3. Agree to the stationing in Kosovo of an international military presence.
4. Agree to the unconditional and safe return of all refugees and displaced persons, and unhindered access to them by humanitarian aid organizations.
5. Provide credible assurance of Milosevic's willingness to work for the establishment of a political framework agreement based on the Rambouillet accords.[41]

The obvious implication of these goals, both President Clinton's and the NAC heads of state, were to compel Milosevic not only to cease his ethnic cleansing campaign but also to reverse his course. According to the definitions in the first chapter of this monograph, this provides clear linkage to a compellence type operation meant to coerce Milosevic, not necessarily defeat him.

Certainly, OAF employed a strategy of gradual escalation, making it an outstanding example for the purpose of this paper. It is both a recent and clearly defined case in point. What is now necessary is to pull the lessons learned from the campaign. Therefore, this chapter focuses on the operational level of the conflict. In particular, it centers on the key lessons as they relate to the employment of airpower outside of a doctrinal context of decisiveness. Along these lines, two major categories serve to focus this search. These are the background for the choice of a gradually escalated strategy and secondly, the actual implementation of that strategy. By strategy, it is meant as the "way" in which "means" are employed to meet the political and military objectives, not in the sense of the strategical level of warfare. In the following

[41] "Statement on Kosovo Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Washington D.C. on 23 and 24 April 1999. *Basic European Security Upd*ate. Available online at http://www.basicint.org/natosum10-13.htm 1-2.

discussion, each of these two areas and the lessons learned relate to the definitions presented in chapter one as well as provide elements for the model presented in chapter five.

The Whys of a Gradual Escalation Strategy

Before getting into the lessons learned from employing a gradual escalation strategy, it is essential to understand why NATO chose such a strategy in spite of the prevailing American military doctrine espousing the decisive application of force in nation-state conflicts. There are three primary reasons why this occurred, each with its own sub-categories of reasoning.

1) The historical framework of NATO's conflict with Serbia.
2) The issue of time versus force applied in attempting to coerce Milosevic.
3) NATO's own cohesion as an alliance (not as a coalition).

Interwoven throughout these reasons and tying them together is the concept of risk with the risk to alliance cohesion assuming the primacy of place.

Regarding the historical framework, Operation Deliberate Force provided NATO leaders with a recent successful use of airpower coercion. Discussed in-depth in the last chapter, Operation Deliberate Force, solidified in NATO leaders minds, the use of airpower as the weapon of choice. The use of limited air strikes convinced the Serbs to back down from their objectives in Bosnia. The lesson NATO leaders took away was that airpower was capable of achieving coercive effects with little to no casualties or collateral damage. It set the precedent for NATO's hopes to coerce Milosevic regarding the Kosovo situation.

In addition, ODF conditioned leaders to short, surgical campaigns. Writes Rebecca Grant, a fellow at the Eaker Institute, concerning NATO planning for Kosovo operations, "…the military planning was caught in a dilemma. NATO was most likely to agree to short, sharp strikes to demonstrate resolve and push along the diplomacy. However, Milosevic's troops held the advantage on the ground in Kosovo. Any attempt to stop the Serbs from pushing out the

ethnic Albanians might have to go through Milosevic's military force in Kosovo."[42] Stated another way, airpower provided the "short, sharp strikes" but doubt remained as to whether these types of strikes could compel Milosevic to withdraw his ground troops. This directly ties the historical contextual framework to the issue of time versus force applied in achieving the alliance's coercive goals.

The idea of time versus force application regarding Operation Allied Force is firmly rooted in NATO's desire to end the conflict quickly. NATO's CONPLAN 10601, which eventually formed the basis for Operation Allied Force, found its origin in an incremental approach that balanced force application over time to provide Milosevic ample opportunities to meet NATO's demands. It took a phased approach in the hope that Milosevic would capitulate early in the campaign. It was but one of approximately 40 air campaign plans generated by US or NATO staffs throughout the months leading up to OAF.[43] It certainly was not the most doctrinal application of military force but it did offer NATO political leaders a more domestically palatable option than the decisive use of force.

However, as inferred in the discussion above on planning for a "short, sharp" campaign, this plan had one serious weakness. Rebecca Grant expressed it well when she wrote,

> In theory, NATO could show resolve with a short, sharp air operation or move to a phased, graduated campaign that could be regulated in intensity. But there was a weak spot. Airmen could strike a batch of key targets quickly, but the plan to go after Yugoslav military forces would take much more effort and political resolve…If limited strikes did not work, it would take a sustained air campaign with 24-hour operations to halt or disrupt the Yugoslav army forces in Kosovo…The more Milosevic pressed his tactical advantages with military and para-military forces in Kosovo, the harder it would be for NATO airpower to achieve fast results – unless just a show of force would do the job.[44]

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[42] Grant, 4.

[43] Multiple plans were produced, some within U.S. only staffs such as Operation Nimble Lion, which was much more in line with current U.S.A.F. doctrine, and some from SACEUR's planning staffs. Due to the convoluted nature of NATO's command and planning structure, at least 40 different plans were generated in preparation for Kosovo operations. Conflicting objectives and strategies certainly placed a great, redundant and probably unnecessary burden on many staff officers within the various staffs. Benjamin S Lambeth, *NATO's Air War for Kosovo: A Strategic and Operational Assessment*. Santa Monica, CA.: RAND, 2001. 11 –12.

[44] Grant, 6.

NATO's problem lay in the fact that its stated goals of halting the ethnic cleansing and the removal of Serb forces from Kosovo conflicted with the viability of a "short, sharp" campaign. Attacking Milosevic's dispersed fielded forces would take a considerably longer and considerably greater effort than NATO was willing to countenance. This was primarily due to the need to preserve the alliance's cohesion regarding its involvement in the quagmire of Kosovo.

The last and most important reason for NATO's choice of gradual escalation strategy was the need to preserve the alliance's cohesion over time. First though, a common misuse of terminology surrounding the Kosovo conflict needs addressing. This is namely, the misuse of the interchangeability of the words alliance and coalition. NATO's effort in Operation Allied Force was done within an alliance context not a coalition. As Admiral James Ellis, commander of the American JTF effort in Operation Allied Force stated in his testimony before the U.S. Congress, "In my view, fighting effectively as an alliance is a remarkable achievement. Unlike a coalition, which forms after a crisis as a group of willing participants who agree on both means and ends, an alliance exists before the crisis, with no such consensus. NATO existed for nearly 50 years, you noted Mr. Chairman, before the Balkan challenge, and each member of the alliance saw the emerging situation from a legitimate and slightly different perspective." He goes on to point out "that democratic alliances will always require a consultative mechanism."[45] These points are crucial to understanding the importance of NATO solidity to the operation.

Within this framework of NATO cohesion, the need for minimal casualties and collateral damage reigned supreme.[46] This was in part due to the political nature of what was essentially a humanitarian operation intended to protect the Kosovar Albanians. The NATO member nations were not fighting a war of survival and thus the perceived popular commitment to the operation

[45] The perceived misuse of these words stems from the author's research of multiple articles as well as discussions within the School of Advanced Military Studies during the academic year 2001 –2002. Both quotes are from - U.S. Congress. Senate, Committee on Armed Services, Lessons Learned From Military Operations and Relief Efforts in Kosovo, 21 October 1999. 7

manifested itself in a concern for casualty rates and collateral damage. Alan Stephens, a senior research analyst for the Royal Australian Air Force, writes about NATO's concern with cohesion, "NATO's resolve to do what was necessary in Kosovo might well have unraveled in the early weeks had extreme force been used and extreme reactions generated. As it was, world opinion was gradually conditioned to a 'measured and steadily increasing use of air power' which minimized NATO casualties and gave the enemy time to assess the situation."[47] Essentially, NATO risked cohesion if casualties or collateral damage went above a very low threshold of pain.

Gradual escalation was and is risky in terms of achieving victory for a variety of reasons including the pressure of time, passing the initiative to the coerced opponent at times, and the ability to sustain the effort for the coercer. On the other hand, the decisive application of air power was risky due to its threat of shattering the cohesiveness of the alliance. NATO, in choosing a strategy of gradual escalation, chose the less risky political option even as it chose the less effective military strategy. Senator Carl Levin, as noted below, precisely points this out during a hearing on the Kosovo military operations in October of 1999.

> And yet, they (decisive, unilateral operations) were set aside because we never could have begun. Milosevic would be in Kosovo today if we had said we want to send ground troops in immediately and if no one else can have a say on target sets, because we couldn't have operated unless we operated alone and then we wouldn't have be able to have the support, the airfields and the other things, which Italy and other countries provided us. So that was a choice to operate with increased (military) risk, as you point out, or basically not at all. And then the question is – what the chairman asked, "Was that risk worth taking" – that increased risk to your son and to others – "worth taking in order that we could act as an alliance against Milosevic?", and if the alternative to operating with the increased risk was not acting at all or acting unilaterally, those options have got to be looked at, as well, with the terrible downsides and risks to our security, the world's security, if we had done nothing and allowed Milosevic to take over.[48]

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[46] According to Rebecca Grant, "Commanders feared that losing aircraft could crumble NATO's will to continue the campaign." Grant, 12.

[47] Alan Stephens, *Kosovo, Or the Future of War,* RAAF Fairbairn, Australia: Air Power Studies Center, August 1999. 14.

[48] U.S. Congress. Senate, Committee on Armed Services, Lessons Learned From Military Operations and Relief Efforts in Kosovo, 21 October 1999. 14.

During Operation Allied Force, political risk overrode military effectiveness. NATO simply acted in a risk-averse manner. This is certainly consistent with the idea of domain of gains presented earlier.

In chapter one, an explanation of the domain of gains and losses presented the idea that nation-states act in a risk averse or risk taking manner depending on what is at stake. This idea forms the last argument as to why NATO chose a strategy of gradual escalation. It also explains why NATO's plan for a "short, sharp" campaign was flawed from the start. Essentially, NATO was operating from the domain of gains while Milosevic was operating from the domain of losses.[49] This is an important distinction and both viewpoints deserve analysis.

What NATO had to gain from a successful campaign consists largely of nebulous, fleeting perceptions. Essentially, NATO gained a greater cohesiveness among its members, greater world prestige from a humanitarian standpoint and greater stability in the Balkans region. What this meant though was that NATO's stake in the conflict did not involve the alliance's or any member state's survival. Hence, NATO was almost exclusively in the domain of gains. As noted earlier, this domain involves generally risk adverse behavior and helps to explain NATO's choice of a gradual escalation strategy.

Conversely, Serbia with its close historical, political and ethnic ties to Kosovo was operating in the domain of losses. If Milosevic lost authority over Kosovo, his authority over Montenegro and control of the Federal Republic of Yugoslavia (FRY) might be threatened. To give up Kosovo without a fight presented significant risks to Milosevic's power. This made Milosevic more risk receptive than he had been in Bosnia where he operated in the domain of gains. The point here is that NATO critically misjudged Milosevic's response to an air campaign when the NAC thought the operation would be of short duration. Ultimately, NATO won but at

[49] Milosevic's risk taking behavior is embodied in his all out ethnic cleansing campaign in Kosovo that began after the start of the air war. Fortunately for NATO and to Milosevic's harm, his risk turned world opinion against the Serbs and in favor of NATO as well as significantly strengthening NATO's resolve.

much greater expense, effort and time than was initially envisioned. This was primarily due to misjudging their opponent, his will and his propensity to take risks. (see footnote 49)

In the end, NATO adopted a risk mitigating strategy. Whether it worked through accident or design is still open to debate. The intent of this section has not been to judge the actions of NATO, but merely to lay down the reasons why NATO chose a gradual escalation policy. The next section lays out some of the ways NATO prosecuted this strategy. It concerns itself not with the whys but with the hows of NATO's air campaign.

The How of Gradual Escalation in Operation Allied Force

Understanding why NATO adopted a gradual escalation strategy builds the framework upon which to hang the employment lessons learned. The whys provide the lens through which to see the how of employment. For it is the actual employment of a gradual escalation strategy that provides insights for incorporation into doctrine and the training of future planners.

Many lessons learned have already been drawn regarding Operation Allied Force to include friendly C2 structure, the lack of a robust SEAD capability, and the need to improve real time targeting.[50] However, to narrow the scope of this chapter, the focus is on the operational level lessons of Operation Allied Force in relation to coercive air warfare. Accordingly, this monograph deals with three key lessons arising from the disconnect between the political strategy and decisive military doctrine. These are, 1) Targeting, 2) The lack of feedback mechanisms in gradually escalated conflict and, 3) The time/force relationship between sustaining or increasing the level of pressure on the coerced. Certainly, subsets of these categories overlap each other but each is also distinct enough in its own fashion to warrant a separate discussion.

In his testimony before Congress, General Wes Clark, SACEUR, listed four measures of merit, essentially targeting criteria, by which NATO could judge the effectiveness of the air campaign. These measures "were avoiding the losses of aircraft dealing with the risk issue,

maximizing the military impact and political impact of the strikes against the centers of gravity both tactical and strategic, working to avoid collateral damages because we knew what the political impact in allied countries and this country would be of collateral damages, and maintaining alliance cohesion."[51] Two of these measures, the strikes on centers of gravity and the collateral damage concern, are clearly targeting issues while the other two measures significantly affected targeting capabilities. The attempt to avoid aircraft losses forced allied aircraft to employ ordnance from higher altitudes, significantly degrading their ability to find mobile targets. Similarly, the imperative to maintain allied cohesiveness required that each NATO country had a say in targeting issues. All of these constraints significantly affected the prosecution of the air campaign.

Within targeting, there are two key points to take away. First, the decision to employ a denial versus a combination punishment/decapitation policy caused considerable friction among senior military leaders. Clearly, Lt Gen. Short wanted to conduct a decisive, devastating campaign to coerce Milosevic into meeting NATO's demands.[52] However, for reasons discussed previously, this type of campaign was not feasible. The second point is Operation Allied Force demonstrated the efficacy of precision weapons. With the use of new precision weapons, air planners addressed the issues of collateral damage and civilian casualties in a way that appeased NATO's political concerns.

The essence of the problem lies in the choice of operational strategy to meet the political objectives. As stated earlier, NATO's main political goal was to stop the Serb atrocities in Kosovo. In light of this, it seems clear that a denial strategy focused on Serbia's fielded forces in

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[50] Lambeth, Benjamin S, *NATO's Air War for Kosovo: A Strategic and Operational Assessment*. Santa Monica, CA.: RAND, 2001. xvi.

[51] U.S. Congress, Senate, Committee on Armed Services, Lessons Learned From Military Operations and Relief Efforts in Kosovo, 21 October 1999. 15.

[52] Ibid. 9 – 10. The direct quote from Lt Gen. Short reads, "Mr. Chairman, as General Clark has noted, there were indeed differences in philosophy on how to conduct the air campaign." He goes on to say, "Sir, I'd have gone for the head of the snake on the first night. I'd have turned the lights out the first night. I'd

Kosovo was the correct strategy. However, targeting dispersed troops from the air in mountainous and forested terrain is extremely difficult. Thus, Lt Gen Short pushed hard for what amounted to a decapitation/ punishment strategy. His intent was to bring the pressure and pain directly to Milosevic and his party cronies. The belief being that Milosevic himself was the strategic center of gravity. This strategy is clearly in line with U.S. Air Force doctrine; strike decisively, quickly and with the maximum amount of force at parallel centers of gravity. Once again, this was not politically feasible.

Additionally, in their testimony before congress, both Lt Gen. Short and Gen. Clark highlighted the support by NATO for a denial strategy but not for a punishment/decapitation strategy. Speaking in response to a question concerning the employment of airpower in support of potentially deployed ground troops, Lt Gen. Short replied, "No sir. There was never any problem with the nations about supporting ground troops. I had unanimous support on that."[53] Shortly thereafter in the testimony, Gen. Clark speaks of targeting issues with, "The problems were the politically sensitive targets, the ones that had a dual nature, such as the television, the electric power, and things like this. This is the ones—and the bridges around Belgrade. These were the ones that got the high level focus and the concern." [54] These two statements clearly highlight what senior airmen missed, that targets matching a denial strategy also met NATO's intent and had clear support. However, most dual nature targets were seen by some NATO members as meant for a punishment/decapitation strategy, and therefore were fraught with political risk.[55]

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have dropped the bridges across the Danube…Milosevic and his cronies would have waked (sic) up the first morning asking what the hell was going on. This is the first night."

[53] U.S. Congress. Senate. Committee on Armed Services. Lessons Learned From Military Operations and Relief Efforts in Kosovo, 21 October 1999. 27.

[54] Ibid.

[55] Lambeth provides an outstanding example of the difficulty NATO had in prosecuting a punishment/decapitation strategy on page 36 of his book. He relates how the Dutch government "steadfastly refused" to target Milosevic's presidential palace simply because it contained a Rembrandt! Unmistakably, the risk to cohesion of the alliance took precedence over strategy.

The lesson here then is this; the doctrine that works best does not apply for all situations. If the Air Force's doctrine is designed to apply the optimal force in all situations, it is not flexible enough for today's environment. How the Air Force applies force in wars fought for humanitarian reasons clearly needs rethinking. A punishment strategy does not fit in a war fought to protect civilians. Clearly, support for attacks on enemy fielded forces will almost always be considered politically feasible and valid while attacks on a country's infrastructure may not. The risk of collateral damage and civilian casualties will continue to drive air power away from a purely punishment strategy. However, hope is not lost for the advocates of strategic punishment strategies. Precision weapons have made punishment a far less risky proposition in coercive warfare.

Operation Allied Force saw the first use of the new generation of precision guided weapons. In particular, the Joint Direct Attack Munition (JDAM), a GPS guided all-weather munition, and the AGM-130, a data-linked guided missile, provided NATO with unsurpassed strike precision. Precision strikes significantly reduce the risk of collateral damage. This risk was further reduced by NATO rules of engagement that stipulated attack windows when civilians were least likely to be affected. The lesson that precision engagement reduced the risk to both aircrews and collateral damage is highlighted in the Kosovo/Operation Allied Force After Action Report to Congress. It states, "Because pilots could now employ direct attack weapons at less risk, less costly legacy weapons were, in many cases, as effective (and sometimes more) as more costly preferred weapons…"[56]

Additionally, and perhaps a more critical point concerning precision weapons is that brought up by then Vice Chairman, Joint Chiefs of Staff, General Joe Ralston. Speaking at the Air Force Association Policy forum, "Aerospace Power and the Use of Force" on 14 September

[56] U.S. Department of Defense, *Kosovo/Operation Allied Force After-Action Report*, by Secretary of Defense William S. Cohen and Chairman of the Joint Chiefs of Staff Henry H. Shelton, Report to

1999, he commented, "With the now famous visual images from Desert Storm reinforced by even more dramatic successes in Kosovo, PGMs along with space assets, stealth, cruise missiles, electronic countermeasures, and advanced reconnaissance and surveillance platforms, may have added sufficiently strong teeth to make a strategy of gradualism work."[57] If technology, and in particular precision weapons, mitigates the risk of collateral damage and loss of aircrews then perhaps Gen. Ralston is correct. The lesson to take away from this is that airpower now has the capability to successfully coerce opponents in a severely constrained environment. Doctrine just needs to catch up with the capability.

However, targeting was not the only significant problem in OAF. The second key lesson involves the lack of feedback mechanisms to effectively judge the coercer's effect on the coerced. In decisive warfare where the military objective is the defeat of the enemy, feedback comes in the form of battle damage assessment and the enemy's ability to continue resistance. The degree of success comes in the form of enemy assets destroyed, ground gained or lost, and the enemy's ability to affect your forces and plans. Feedback is constant, if at times unclear or surprising. However, when the goal is to compel versus defeat an enemy, feedback on the coercer's effects can only be surmised until the coercee capitulates. Until that time, you are reacting to his actions, and only rarely is it possible to get in front of the opponent. How do you read the mind of your opponent to see if you are getting to him?

In Benjamin Lambeth's comprehensive study on the Kosovo air campaign, he states, "…because the goal of Allied Force was more to compel than to destroy, it was naturally more difficult for senior decisionmakers to measure and assess the air war's daily progress, since there was no feedback mechanism to indicate how well the bombing was advancing toward coercing Milosevic to comply with NATO's demands. *It was largely for that reason that most Allied*

Congress. 31 January 2000. 90. (For example, a $15,000 JDAM had the same effect as a $1,000,000 cruise missile)

Force planners were surprised when he finally decided to capitulate."[58] To this day, no one is sure why Milosevic capitulated when he did. Secretary Cohen's and General Shelton's after action report to Congress devoted three pages to why Milosevic capitulated, opening with the caveat that it is essentially speculation.[59]

Certainly, this lack of a feedback mechanism is not unique to Operation Allied Force. It does however, serve to highlight the difficulty in getting inside an opponent's mind in a coercive conflict. This is relevant to any coercive warfare model designed as a planning tool. Without an operational level feedback mechanism, there is less certainty in whether the application of force produces enough pressure in the correct places. Compounding the problem for planners is the gradual application of force. When, how much and where become guesses and the risk of wasting limited resources increases. This leads to the third key lesson from OAF regarding coercive airpower application, namely the idea of applying sustained versus increased pressure.

A gradual escalation strategy creates difficult time/force application problems for military planners. Specifically, in assessing when it is appropriate to escalate the conflict. Because gradually escalated campaigns are orchestrated to send signals through the acceleration of tempo, frequency, force and/or geography, understanding the relationship between sustained and increased pressure is difficult. When matched with little to no feedback mechanisms on the enemy's reaction, the task is seemingly Herculean. Compounding the problem even more is the unique aspect of shared initiative between the coerced and the coercer.

To a certain degree in a campaign of coercion, the coercer gives up the initiative. By this, it is meant that the coerced is the only one who can make the decision to alter the offending

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[57] Gen Joseph W. Ralston, Vice Chairman, Joint Chiefs of Staff. "Aerospace Power and Military Campaigns." Address to the Air Force Association Policy Forum, 14 September 1999. 4.
[58] Benjamin S Lambeth, 232. *(Emphasis added.)*
[59] U.S. Department of Defense, *Kosovo/Operation Allied Force After-Action Report*, by Secretary of Defense William S. Cohen and Chairman of the Joint Chiefs of Staff Henry H. Shelton, Report to Congress. 31 January 2000. 10. In the report, the opening line contains the phrase "...it can never be certain about exactly what caused Milosevic to accept NATO's conditions…" It then goes on to list likely factors

behavior. The coercer, short of escalating to decisive operations designed to defeat the enemy, can only apply increasing pressure in reaction to his own failure to convince the coerced to act. Still, the coercer retains some of the initiative by controlling when, how often, how much and where he applies pressure. The difficulty for planners lies in understanding how this shared initiative plays out over a campaign.

The start of the Kosovo campaign offers an excellent example of this tension between sending effective messages, a lack of feedback mechanisms and shared initiative. The first three nights of Operation Allied Force consisted of strikes flown against fixed military targets.[60] The only apparent effect this had on the Serbian fielded forces was to increase their tolerance for the slightly escalated pain level.[61] By the end of the third day, Milosevic, in complete defiance of NATO's air attacks, significantly accelerated his ethnic cleansing campaign. Soon, the Yugoslavian 3rd Army with approximately 40,000 troops and 300 tanks crossed the Kosovo border.[62] NATO, committed to limited air strikes on fixed targets for a limited time, was caught unprepared to halt this Serbian offensive. "The politics of the situation meant that NATO missed the chance to let its airmen do it 'by the book' and halt or disrupt Milosevic's forces as they massed on the border and moved into Kosovo."[63] Essentially, the initial force applied was too little, too infrequent and at the wrong points. Milosevic's actions forced NATO to either commit to a greater effort or quit.

NATO responded by escalating the pressure. Sustained pressure rapidly became increased pressure. "As US Secretary of State Madeleine Albright explained on 28 March, the

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that influenced the Serb leader. Milosevic has not revealed why he made his decision as of the writing of this monograph.

[60] According to Lambeth, the first night strikes consisted of 120 attack sorties against "40 targets consisting of five airfields, five army garrisons, communications centers, and storage depots, in addition to IADS facilities." The second night, strikes were heavier but still against fixed sites, eighty percent of which lay outside Kosovo. The third and last night before Milosevic significantly increased his ethnic cleansing campaign, increased the percentage of targets in Kosovo to forty percent. Lambeth, 23 – 24.

[61] Lambeth, 24.

[62] Grant, 9 – 10.

[63] Ibid.

new goal was to force Milosevic to back off by 'making sure that he pays a very heavy price."[64] Within three weeks of the start of the campaign, NATO, in response to Milosevic's actions, escalated the conflict. In effect, NATO, the initiator of the conflict was playing catch up. The key take away here centers on the fact that in gradually escalated conflicts the coercee's actions or inaction often dictates the tempo of the conflict.

Summary

From NATO's standpoint, the key component of Operation Allied force was the mitigation of risk in relation to alliance cohesion. The NATO states entered the Kosovo conflict for humanitarian reasons, not for national survival. The various NATO states were under no compunction to enter the conflict. However, once committed, NATO faced serious threats to its credibility and alliance cohesiveness should the campaign fail. Thus, in order to conduct the campaign, NATO could not risk a loss of cohesion. The key threats to this cohesion came from friendly aircraft losses and collateral damage incidents. In relation to strategy options, decisive operations posed the greater risk to cohesiveness vice a gradually escalated coercive strategy.

In choosing a coercive strategy tied to humanitarian reasons and political objectives for intervention, as well as the desire to avoid collateral damage, NATO all but forced planners to concentrate on the Serbian fielded forces. This is not to say this was wrong, clearly the political objectives focused on the Serbian forces in Kosovo. However, NATO's choice of a denial strategy, missed one key ingredient for success. Denial strategy works best with friendly or neutral ground troops in the area of operations.[65] If this is not the case, denial becomes particularly difficult if the enemy disperses, as was the case in Kosovo. It created serious tension

[64] Ibid.

[65] A good example of using neutral troops to concentrate the coercee's troops occurred during Operation Deliberate Force. The presence of the Bosnia Muslims and Croats forced the Bosnian Serbs to concentrate. However, NATO airpower did not support or act in conjunction with these neutral forces. Their presence merely provided the means to force the Bosnian Serbs to concentrate.

between the need to protect the aircrews and the need to accept greater risk inherent in proper identification of well-hidden and dispersed targets.

Conversely, a punishment/decapitation strategy that was politically infeasible due to the humanitarian nature of the conflict, when employed in combination with precision weapons, may have reduced risks. Certainly, fixed targets do not carry the risk involved in finding mobile targets and the standoff precision weapons provided an outstanding accuracy in combination with significantly reduced risk to the aircrews. It certainly fits with U.S.A.F. doctrine of decisive, strategic paralysis. Yet the fact remains, NATO was not willing to fully adopt this strategy until Milosevic made the mistake of escalating ethnic cleansing and thus the entire conflict.

In Kosovo, NATO applied a combination of these strategies to good effect. However, the time/force application involved was improperly executed. NATO missed opportunities by misjudging their opponent as well as NATO's ability to react quickly enough when escalation became necessary. The lesson for planners is that the tools for airpower coercion are available if not codified. What is missing is the mature understanding of time/force application. Maturity comes by experience and knowledge. In the military, training and doctrine provide the knowledge necessary for air planners to effectively employ airpower. The next chapter shows how U.S. Air Force doctrine is inadequate in the area of applying coercive warfare.

CHAPTER 4

THE MISSING LINK: COERCIVE WARFARE IN AIR FORCE DOCTRINE

> There is no point really, for air power exponents grumbling about escalation or gradualism. If we are going to maximize air power responsiveness, we will have to turn it on and turn it off. The important thing is to make sure we reach the necessary impact before we turn it off and establish hard-nosed rules for gaps.
>
> Air Vice Marshall Tony Mason, 16 Aug 1999
> Address to the Air Command and Staff College

Introduction

In February 2001, the U.S. Air Force Directorate of Strategic Planning held a conference entitled *Unified Aerospace Power in the New Millennium.* During this conference, Gen Wesley Clark gave the keynote address concerning 21st Century Coalition warfare. Listed in the summary of his remarks, contained in the conference report, are eleven lessons learned from Operation Allied Force, the air campaign over Kosovo.[66] Three of these lessons are particularly telling as relates to doctrinal warfighting and are as follows:

1. *The US will not have much control over allies, weapons, or targets*. Though NATO command elements worked well together, there were numerous issues impacting national sovereignty and interests that affected the conduct of the campaign. Allies must be treated with respect.

2. In Kosovo, *mid-level officers had no real concept of war as an instrument of coercion*. They would pick targets based solely on their understanding of generating "system" effects, for instance, stopping vehicle production without considering how this effect might influence the overall coercive goal of the war. The military needs to educate and train people to understand the art of warfare and the prosecution of war.

3. *While the armed forces of the US may, in their quest for victory, believe it is doctrinal to seriously damage an enemy's civilian economic infrastructure as a part of a coercion campaign, many of these targets are now illegal.* Moreover, regional allies (who must live much more closely with the consequences of war than the US) are unlikely to agree with U.S. doctrine.[67]

[66] Unified Aerospace Power in the New Millennium Conference Report. 13 – 14.
[67] Ibid. *emphasis is the author's*

Taken together, these lessons point to a doctrinal gap and training shortfall within the Air Force regarding coercive warfare. This chapter seeks to highlight those doctrinal gaps as a stepping stone to the conclusive chapter recommending doctrinal changes to fill the holes.

Purpose of Doctrine

The three primary documents used in this chapter are AFDD 1 *Air Force Basic Doctrine* Sep 1997, AFDD 2 *Organization and Employment of Aerospace Power* Feb 2000, and AFDD 2-1 *Air Warfare* Jan 2000. Two key points are gleaned from these documents. The first deals with what doctrine **does** say about coercion warfare and the second with what it **does not** say. Pointing out where doctrine addresses coercive warfare accomplishes two ends. It shows Air Force doctrine is not wholly at a loss in representing coercive warfare yet sheds light on the need for greater doctrinal clarification of this issue. Therefore, once it is clear what doctrine does address, finding its weaknesses becomes easier.

First though, a quick discussion of how the USAF views doctrine is necessary to provide the foundation for understanding the Air Force's approach to meeting its mission. The capstone U.S.A.F. doctrine document, AFDD 1 *Air Force Basic Doctrine*, uses wording such as "fundamental principles," "accumulated wisdom," " linchpin of successful military operations," and "best way to prepare and employ air and space power" when commenting on doctrine.[68] Perhaps the most telling statement comes from AFDD 1,

> Military doctrine describes how a job should be done to accomplish military goals; strategy defines how it will be done to accomplish national objectives…Doctrine evolves from military theory and experience and addresses how best to use military power. However, political, economic, or social realities may dictate strategic and operational approaches that depart from accepted doctrine when leaders develop our national security strategy or develop plans for particular contingencies.[69]

[68] See AFDD 1 Introduction and pages 1 and 2 for a comprehensive view of how the USAF views its doctrine. While doctrine is authoritative, it is not a scripted checklist and commanders are encouraged to adapt doctrine as the situation dictates. However, without at least a discussion of how to employ aerospace forces in gradually escalated conflicts, commanders are left with only experience to guide their decisions.
[69] Air Force Doctrine Document (AFDD) 1. *Air Force Basic Doctrin*e, September 1997. 4. (emphasis in the original)

Thus, the Air Force clearly states its concept for the role doctrine plays in relation to national objectives.

However, this statement shows the first crack in the Air Force's doctrinal concept. The word "should" here is problematic. It implies that military doctrine is not flexible enough to meet political reality. A better word than "should" is "can" which, while still appropriately limiting, denotes flexibility. This is more than mere semantics. If U.S.A.F doctrine is not able to effectively address "particular contingencies" based on political factors then it needs modifying. This is not to argue that doctrine should not espouse the best known ideas and experience for the employment of airpower. On the contrary, it most definitely should. Nevertheless, this argument proposes to broaden doctrine so that it better addresses the political realities of a democratic state.

What Air Force Doctrine says about Coercive Warfare

The starting point in Air Force doctrine for discussing airpower and coercive warfare is found in AFDD 2. Introduced under the category of *Deterrence and Contingency Ops*, "Coercion" and "Air Siege," are ways airpower contributes to meeting national strategy objectives.[70] The paragraph on coercion essentially explains the ideas of deterrence and compellence. Additionally, it introduces two new conceptual terms. The first concept is that of "nonlethal coercion" which is either the use of nonlethal attack to coerce an opponent or the implied use of lethal force to deter the opponent. The second concept is that of "lethal coercion" which is tied closely to the idea of compellence, namely to force an adversary to change or reverse their behavior. It lists Operation Deliberate Force over the Balkans in 1995 as an example of coercive warfare.[71]

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[70] Air Force Doctrine Document (AFDD) 2. *Organization and Employment of Aerospace Power*, 17 February 2000. 17 –18.

[71] Ibid. Lethal Coercion is the idea of compellence with more resolution. The document states, "Lethal coercion employs combat power to punish an aggressor, demonstrate the risk of further aggression, deny the enemy the capability of further aggression, or incapacitate the aggressor's military forces."

The Air Siege paragraph continues the idea of coercion and broadens the discussion by introducing mechanisms by which to employ airpower in coercive situations. Specifically, it mentions the strategies of denial, punishment, risk and decapitation[72] as well as advocating the destruction of the enemy's center of gravity. It lists Operation Allied Force over Kosovo as an example of Air Siege warfare.

The differences in the two paragraphs are minimal. An "Air Siege" is coercive warfare. It can be either non-lethal such as enforcing an air exclusion zone or lethal such as in Kosovo. However, these two paragraphs do represent the longest single discussion in Air Force doctrine relating to the idea of coercion as warfare. While broad in scope, they at least bring the concept of coercion to light and offer a starting point for addressing the issue. The problem though, is there is no linkage from these paragraphs to AFDD 2-1 *Air Warfare*, the Air Force's primary doctrine on operational air war. This lack of linkage is vexing as the concept of linkage is adequately expressed elsewhere in doctrine.

The first chapter of AFDD 2-1 clearly states the necessity for linkages between targeting and objectives. In its own wording, "the process of linking ends and means is a critical requirement for the air strategist." Additionally, it states, "Failure to properly analyze the mechanism that ties tactical results to strategic effects has historically been the shortcoming of both airpower theorists and strategists."[73] Neither of these statements is written solely in the context of decisive or coercive warfare, therefore the document highlights them as presenting critical information for air planners in all situations. Sadly though, this is the last clear discussion of linkages in the document. To be sure, discussion of centers of gravity, phasing, and measures of success are covered, but little is said about the mechanisms for linking them to national objectives.

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[72] Ibid. These strategies are listed by Pape in his book, *Bombing to Win* and were discussed in Chapter 1 of this monograph.

In its discussion of Center of Gravity (COG) identification in the Joint Air Operations Plan (JAOP) cycle, AFDD 2-1 says the following,

> It is important to remember that the type of COG and method of attack may vary widely throughout the range of military operations. Attacks may be restricted by political considerations, military risk, laws of armed conflict (LOAC), and rules of engagement (ROE). Examples of pertinent questions to consider when selecting a potential COG include: Will disruption of activity at this target satisfy a military objective? Is aerospace power the most appropriate and efficient way to strike this target? Are the expected results commensurate with the military risk? Proper analysis of what constitutes a COG, and how best to attack it, form the heart of this phase in JAOP planning.[74]

The positive aspect of this statement is that it mentions possible constraints that air planners might encounter in the planning process. However, the question that comes to mind is where and how is this trained for within the U.S. Air Force? It is a great concept but lacks any doctrinal instruction for the how not just the why. Again, this raises the question of linkages within doctrine between concept and practical application.

One last positive doctrinal reference relating to coercive warfare comes from page 44 of AFDD 2-1. It is a broadly conceptual paragraph that begins with Sun Tzu's writings concerning the strategy of defeating an enemy's plans.[75] The paragraph continues this idea by describing an enemy as "rational, irrational, fanatic, rigid, flexible, independent, innovative, determined, doctrinaire, or countless other ways."[76] Additionally, it briefly speaks to the need for ascertaining what an enemy's intentions, objectives and "willingness to sacrifice" might be in any particular conflict. Taken as a whole, it presents the enemy as having a vote in any conflict and that the opponent's reactions do not always follow a rational line of thought. Again though, as with the other well-written conceptual ideas presented in doctrine, there is inadequate linkage to the planning examples in the practical planning appendices of AFDD 2-1.

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[73] Air Force Doctrine Document (AFDD) 2-1. *Air Warfare*, 22 January 2000. 3. Both quotes in the above paragraph are from the same page and section of AFDD 2-1 listed.
[74] AFDD 2-1, 40 – 41.
[75] Sun Tzu's book, *The Art of War*, stresses that commanders should seek to defeat an opponent's plan thus rendering the opponent ineffective before a conflict commences.
[76] AFDD 2-1, 44.

Up to this point, the discussion has dealt with the conceptual issues relating to coercive warfare which doctrine addresses. Now we start on the road to showing current doctrine's failure to link concepts to planning. While the appendices in AFDD 2 and AFDD 2-1 are examples and not the only way of accomplishing planning, they are the only examples provided. None of them adequately addresses planning factors for coercive warfare as distinct from decisive warfare. Specifically, it is in this area where doctrine fails to give planners the necessary tools needed to operate in the post-modern environment.

Planning For Coercive Warfare: Is there a Difference?

Almost all of the planning tools in AFDD 2-1 mention constraints, either in the form of political or moral restraints. Examples given range from alliances to rules of engagement to social/domestic pressures. Nevertheless, what is not mentioned is how they apply to conflict, only why they apply. There is no discussion in either AFDD 2 or 2-1 on what planners must do to overcome or work around constraints. Nothing in these two documents addresses the application of force when constraints outweigh sound military principles except to say "that military commanders should delineate for political leaders the military consequences"[77] of fighting under such constraints. The question then becomes how do planners plan when political realities outweigh sound doctrinal concepts? Doctrine needs to incorporate some examples and a starting point for planners confronted with these situations. Currently this is lacking.

The discussion on Center of Gravity Development in AFDD 2-1 serves as an example of how doctrine fails planners when they are confronted with highly constrained strategic plan development. The associated diagram works well for a denial strategy when fielded forces are the target set of choice. However, using this model in conjunction with a decapitation/punishment strategy in a coercive conflict creates some significant targeting

[77] AFDD 1, 4.

problems. In highly constrained conflict, a large number of economic or infrastructure target sets are not feasible targets. Using this model

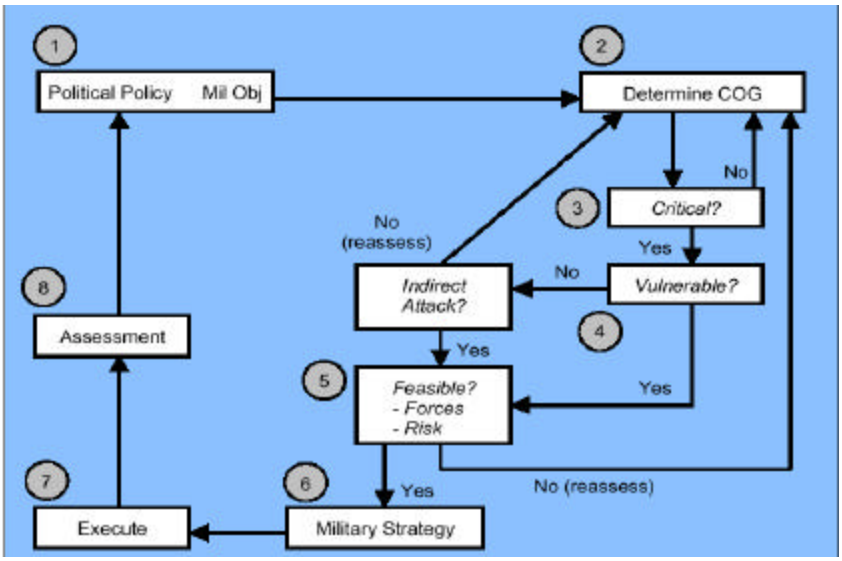

Fig. 2 Center of Gravity Analysis

1. Receive overall policy and military guidance from above.
2. Analyze the adversary for possible COGs.
3. Determine if candidate COGs are truly critical to the enemy strategy. This analysis must include a thorough examination of the mechanism by which COG influence will affect enemy strategy.
4. Determine if identified COGs or their linkages are vulnerable to direct attack. If not, examine for possible indirect attack.
5. Determine if the method of influencing the COG is feasible, considering such questions as number and quality of friendly forces, ROE, level of conflict, projected losses, etc.
6. Develop overall military strategy to support the military objectives. Among other factors, the strategy must consider objectives, threat, environment, mechanism, and law of armed conflict. [78]

planners find multiple COGs that are critical and vulnerable but not feasible to direct attack. Following the loop, when COGs are not feasible they roll back to determine COG. In a politically constrained environment, the number of COGs quickly runs out and planners are left with only very limited targeting options. Often, indirect attack becomes the only option. With

limited target sets, planners face the problem of how to maintain pressure while preserving a credible threat. This is more than just Tactics, Techniques, or Procedures; it is operational art and must be addressed in doctrine.

The essence of Air Force doctrine and training provides the "why" but not the "how" when discussing politically constrained, coercive conflict. As shown, there are multiple references citing the need to address constraints and restraints when planning air campaigns. Additionally, Air Force doctrine clearly gives planners guidance on how to frame the conflict, how to set objectives and identify centers of gravity. The missing link then is not what or why but *how* to work within these constraints and restraints to produce a feasible, effective JAOP.

Summary

The problem is that Air Force doctrine and planning courses focus on planning for strategic, parallel attack.[79] This is not in the sense of the Air Force functions of strategic attack or counterland, but in the sense of a strategy to affect the entire enemy system to produce strategic paralysis. This is a broader application of the Soviet General's Svechin and Triandafillov's concept of operational paralysis, written during the 1930s. It is an outstanding concept that works well for a major theater war (MTW).[80] However, in conflicts such as Operation Allied Force where constraints and restraints severely limit the ability to create strategic paralysis, doctrine fails to provide a model.

Furthermore, Air Force Doctrine advocates using airpower through a trigger mechanism. Its application, once released for attack, is to strike hard, fast and consistently until an opponent is

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[78] AFDD 2-1, 96.

[79] For an in-depth study on air campaign planning see the *Air Campaign Planning Handbook*, March 2000 located on-line at www.cadre.au.af.mil/warfarestudies. It is outside the scope of this paper to address training issues involving campaign planning except for cursory references. As a point of reference, the *Air Campaign Planning Handbook* is an excellent planning tool but does place a heavy focus on a decapitation/ punishment strategy. For instance, in the planning example given in the handbook, (pages 64-69) requires planners to "justify" why attacking the enemy's fielded forces meets national objectives. Conversely, the summaries for "System Essentials," "Infrastructure" and "Leadership" all assume that these targets meet national objectives.

defeated. However, in gradually escalated, coercive warfare, force is incremental for various reasons. What is needed is not a trigger but a dial to modulate the application of force.[81]

Since the Vietnam War, the US military has sought to reduce friendly and civilian casualties as well as collateral damage. The Air Force response to this problem has been primarily technological. Air Force doctrine, while incorporating technology, has not appreciably altered its strategic bombing emphasis. This creates a false sense of answering the problems of collateral damage and civilian casualties. By advocating what is essentially a combination decapitation/punishment approach to inflict strategic paralysis, Air Force doctrine overemphasizes the target sets (economic and infrastructure) most often denied to planners in coercive warfare. As seen in Chapter 3, Operation Allied Force is a good example of target sets within a decapitation/punishment strategy being denied by political restraints.

Conversely, denial targets are rarely restricted from attack. The trend following WWI advocating strategic bombing, with its emphasis on economic or civilian targets as the way to avoid the bloodbaths of trench warfare, has been reversed. Now the prevailing trend, whether social or political, is to bring the war back to the military. Thus, a denial strategy is often the least constrained course in serving politically constrained objectives. However, this is not the emphasis of Air Force doctrine as it concerns planning for air campaigns.

What is missing in Air Force doctrine is the conceptual "how to" for coercive warfare. Again, it needs stressing that the argument here is not about changing AF doctrine, but adding to it. The goal of this monograph is not to argue against planning to create strategic paralysis but to offer an alternative approach to conflicts where strategic paralysis is extremely difficult. Air Force doctrine and training for its planners is not broken, it just needs to fill a gap regarding coercive warfare.

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[80] For a broader examination of operational paralysis, see Aleksandr A. Svechin's book, *Strategy* and V.K. Triandafillov's book, *The Nature of the Operations of Modern Armies*, edited by Jacob Kipp.

[81] The concept of a trigger and dial arose from a conversation between the author and Dr. Roger Spiller, a history professor at the US Army Command and General Staff College in Fort Leavenworth, KS. He is currently sitting in the George C. Marshall Chair at the college. Dr. Spiller is credited with the concept.

CHAPTER 5

BUILDING THE MODEL

> In designing any policy, one always has to ask oneself a number of questions. First of all, what is the challenge? Then, what are the solutions? With whom do we need to cooperate, and what part of it must we do alone if necessary?
>
> Henry Kissinger, 10 Oct 2001

Introduction

Military doctrine derives from a continuously shifting blend of theory and experience. AFDD 1 reflects this blend when it states;

> Air and space doctrine is an accumulation of knowledge gained primarily from the study and analysis of experience, which may include actual combat or contingency operations as well as equipment tests or exercises. As such, doctrine reflects what has usually worked best. In those less frequent instances in which experience is lacking or difficult to acquire (e.g. theater nuclear operations) doctrine may be developed through analysis of theory and postulated actions. **It must be emphasized that doctrine development is never complete**.[82]

While there is no way to predict what constraints will occur in future conflicts, past conflicts do provide patterns. Chapters two and three of this monograph focused on "the study and analysis of experience." This chapter deals with the theoretical development that is "lacking or difficult to acquire." In this particular case, the difficulty lies in an inability to reproduce the converging, multiple constraints intrinsic to a coercive warfare environment.

In grappling with this shifting interaction of constraints matched to the application of military force, a theoretical model provides a useful aid. The patterns of the past, combined with the psychology of coercive conflict, provide the underpinnings for this model. Once rooted on these foundations, the postulations and speculations for the rest of the model become supportable. It is however, just a model. It is not comprehensive nor does it provide all the answers. It merely attempts to answer more questions than it leaves unanswered. It is a starting point for planners. Its key strengths should be applicability, flexibility, and adaptability.

The Construct

The model in its entirety is presented in appendix A. Appendix B is an historical application of Operation Deliberate Force to the model. It is intended to provide the reader with a concrete example of a theoretical construct. In this section though, Appendix A is broken down by its component parts to provide a clearer understanding of the whole. The reader should not misconstrue this to mean the model is purely linear in nature. On the contrary, it should be viewed as a complex system with interaction of the various components occurring across time and space, sequentially and simultaneously, as well as linearly and non-linearly. Additionally, some factors over arch and influence the system throughout its entirety.

One example of an over arching factor involves the 'other elements of national power.' A key limitation of this model is that it is constructed for airmen planning air campaigns. As such, it does not address how the nation employs its full resources in coercive warfare, which is beyond the scope of this monograph. Nevertheless, planners need to understand the employment of national power comes in many forms of which airpower is but one form. In any air campaign, planners must strive to nest airpower into the overall application of force so that synergistic effects combine at critical times, overwhelming the opponent's will to resist. It is enough for this paper to recognize this relationship while not specifically addressing how these elements combine. That is a much broader topic.

Objectives

This model begins with the political decision to employ airpower to coerce an opponent to cease or reverse a particular course of action. Air Force doctrine is not silent on this issue. In fact, it is quite emphatic when it states, *"Victory in war is not measured by casualties inflicted, battles won or lost, or territory occupied, but by whether or not political objectives were achieved. More than any other factor, political objectives (one's own and those of the enemy)*

[82] Air Force Doctrine Document (AFDD) 1. *Air Force Basic Doctrin*e, September 1997. 1 –2 .(**emphasis in**

shape the scope and intensity of war. Military objectives and operations must support political objectives and must be coordinated and orchestrated with nonmilitary instruments of power."[83] Two key, inter-connected points come from this statement. First, that political objectives "shape" the "scope and intensity" of the war, and secondly, that "military objectives and operations" are subordinate to political objectives. Certainly, doctrine is clear on the relationship of military and political objectives and that political objectives define the application of force.

Consequently, the historical analysis of Bosnia and Kosovo presents three guiding principles for planners. First, military objectives derive from political objectives. Second, rarely do the objectives change, however, will and resolve rise and fall. Lastly, and most importantly, resolve is based on both enemy and friendly actions. The dilemma for planners is how to build measures into the plan that mitigate shifts in resolve. Examples of this include the use of precision weapons to significantly reduce collateral damage; seeking operational paralysis of fielded forces as opposed to strategic paralysis of the leadership or economy; or the use of restrictive attack windows. These are just examples, the point is that planners can not focus strictly on target sets in relation to the enemy, but must consider the target sets in relation to friendly political objectives.

Forces and Filters

Once the political and military objectives are established, it is necessary to ascertain friendly forces available to accomplish the mission. Next, planners should look for both asymmetric and symmetric strengths and weaknesses in relation to the coercee, as each situation is different. As Group Captain A.P.N. Lambert, Royal Air Force, writes in his essay on airpower coercion, "Effective coercion is also not about a fair fight. To be successful, a coercer needs to demonstrate his asymmetry, both of power and invulnerability, to force the perceptions that he

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original)
[83] AFDD 1, 6.(*emphasis in the original*)

has the initiative, and that the opponent is utterly defenceless (sic)."[84] However, in gradually escalated conflicts, knowing the friendly forces asymmetric and symmetric strengths and weaknesses is not enough. Other situational factors severely affect the application of force, causing a coercer to filter his available forces and options through a mesh of political constraints.

The model presents two such filters based on the lessons learned from Bosnia and Kosovo. The first filter is that of political commitment/resolve and time expectations. As shown in the Kosovo example, the political objectives stayed constant throughout the air campaign. The objectives listed by the NAC in the April 23 – 24 meeting were the same as the objectives listed in March when the campaign started. If anything, the military objectives changed over time, from limited air strikes on fielded forces and military infrastructure to attacks on economic infrastructure. What did change over the duration of the conflict was NATO's collective political will and resolve. Initially, NATO's political will severely limited the targeting and attack options for air planners. However, when Milosevic escalated his ethnic cleansing policies, NATO's political resolve strengthened considerably. Conversely, when a NATO bomb struck a bridge as civilians crossed, NATO's resolve for strenuously prosecuting the air war weakened, as embodied by increased restrictions on air attacks.[85] Thus, while objectives may remain constant, political will or resolve to meet those objectives often fluctuates.

One clarifying point about political objectives affecting military objectives needs stating. Namely, that unilateral action by the United States does not preclude significant political constraints from occurring. The United States is not immune to world opinion or media pressures any more than a coalition or an alliance. The idea that alliances or coalitions are the culprits in fluctuating political resolve is clearly not always the case. As a case in point, Senator Levin,

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[84] Stuart Peach, ed. *Perspectives on Air Power*, London: Defence Studies (Royal Air Force), Joint Services Command Staff College Bracknell, 1998, 276.

[85] In Lt Gen. Short's testimony before the Senate, he relates the incident of some civilians dying during a daylight strike against a bridge near Nis. Consequently, planners were restricted to planning bridge attacks

speaking before the Senate about U.S. Congressional actions during Operation Allied Force, stated, "If you want a decisive force strategy, Congress surely wasn't supporting a decisive force strategy in this situation. That is the fact…If we want to look at the lessons learned and if decisive force is always what our goal is in a situation like this, then one of the lessons learned is, Hey Congress, look at yourself. Look at your own contribution to 'added risks' by not supporting decisive force."[86]

Tied closely to the subject of political commitment is the issue of time. Planners must take into account the time expectations of political leaders. Do they expect a quick campaign or one of gradual escalation over time? Each type of expectation carries its own force application constraints. In gradually escalated conflicts, which generally represent low political commitment, the danger lies in giving the enemy time to adjust. Writes Lambert, "Unfortunately, a slow pace means that the target may have time not only to habituate the pain, but also to take effective countermeasures."[87] Conversely, a quick campaign, while denying an enemy time to adjust, carries a broader risk to political resolve if the initial strikes fail to coerce the opponent. Governments not prepared to invest in long term, coercive warfare face serious political ramifications involving prestige and credibility if their "quick" campaign does not produce the desired results.

This leads directly to the second filter in the model, namely the coercer's perception of and inclination towards risk. Historically, risk is a constraint because it dictates the level of force application in terms of tempo, duration, and intensity. During Operation Allied Force, risk involved the effect of casualties and collateral damage on NATO's cohesion. NATO mitigated this risk through restrictions on the application of force. In Bosnia, risk came in the form of the dual key concept of employment involving both the UN and NATO. The risk to Operation

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between 10:00 and 04:00 at night. U.S. Congress, Lessons Learned From Military Operations and Relief Efforts in Kosovo, 21 October 1999. 12

[86] U.S. Congress, Lessons Learned From Military Operations and Relief Efforts in Kosovo, 35.

Deliberate Force was embodied in the actual force application. Planners had to adjust targeting to meet the stringent requirements of two distinct political entities while attempting to apply enough pressure to coerce Milosevic. In both cases, the foremost risks came from friendly constraints and political limitations, not enemy forces.

Further complicating the issue of risk is its non-linearity. A high level of political commitment does not necessarily reduce all levels of risk. In the Kosovo example, NATO's political will increased significantly after Milosevic escalated his ethnic cleansing campaign. In giving NATO reason to escalate, this somewhat alleviated the risk to the alliance's cohesion. However, it increased the risk to NATO's prestige and viability if NATO failed to win the conflict. Certainly, an initial low level of political commitment carries significant political risk if the coercee fails to respond in the desired manner. However, increased political commitment is no guarantee of reduced political risk.

Once the force available has passed through the constraint filters, the strengths and weaknesses transition to friendly capabilities and vulnerabilities, which are the product of filtering friendly strengths and weaknesses through the process. In coercive conflicts, capabilities and vulnerabilities differ from strengths and weaknesses in the same way that net income differs from gross income. Net income is the actual usable income, received from an employer, after taxes and deductions are taken from the gross income. Technically, the gross income belongs to the employee, however, it is never usable by him. In coercive warfare, gross income represents strengths and weaknesses while net income represents capabilities and vulnerabilities.

One problem with the income example lies in the relation of weaknesses to vulnerabilities. Oftentimes, weaknesses are increased, not diminished by constraints, creating greater vulnerabilities on the output end of the filters. This has the potential of forcing planners into spending excessive time mitigating vulnerabilities as opposed to concentrating on

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[87] Peach, ed. *Perspectives on Air Power,* 274.

capabilities. One way of reducing vulnerabilities, graphically presented in the model, is to factor in the effect of enemy's constraints. Every opponent brings constraints to their own force application. The coercer, by seeking to shield his vulnerabilities within the enemy's own constraints, enhances his own capabilities.

The Enemy as a System

Once one's own capabilities and vulnerabilities are known and addressed, the next step is to determine how the enemy views the conflict. Major Kimminau's thesis lists four axioms within prospect theory.[88] Two of these, reference points/risk propensity and framing, are particularly useful for a planner's understanding of the enemy.

According to Kimminau, prospect theory defines a reference point as a neutral starting point, "usually the status quo, a position of comfort with a hypothetical value of zero."[89] It relates to risk propensity in that it places decision makers future actions into either the domain of gains or domain of losses. Kimminau ties this together when he writes, "…for prospect theory, people's risk propensity varies by *domain*. If the reference point puts the outcomes in the domain of gains, people are risk averse, but if they are in the domain of losses then they become risk seeking."[90] Understanding what an opponent views as his reference point and in which domain he views his actions is critical for planners. If an opponent is in the domain of losses, his propensity for risk taking as well as his level of commitment can be vastly different from his level of risk and commitment to actions within the domain of gains.

Of even more use to planners is the axiom of framing. Essentially, framing is the way a problem is viewed, worded or understood. For example, (recommend this example is read more than once as its complexities highlights the difficulty involved with framing)

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[88] Jon A. Kimminau, "The Psychology of Coercion: Merging Airpower Theory and Prospect Theory," Thesis, School of Advanced Airpower Studies, Air University, Maxwell AFB, Al.: 1998. 12 - 15.
[89] Ibid, 13.
[90] Ibid, 13. (*emphasis* in the original)

> A group of subjects is given a hypothetical choice between alternative programs to combat the outbreak of a disease which was expected to kill 600 people.
>
> The first group is told that program A will save 200 people, while program B has a 33% chance of saving 600 people or 66% chance of saving none.
>
> The second group is told that 400 people will die in program A, while in program B there is a 33% chance that no one will die and a 66% chance that 600 will die.
>
> 72% of the first group prefer program A, while 78% of the second group prefer program B. The parameters of the decision are exactly the same.[91]

Kimminau further explains that, "When people choose reference points based on recent changes in their assets, comparison with other people, or sensitivity to words used in describing a problem, they can psychologically put themselves in the domain of gains or domain of losses even though objectively *they are not in that domain*. He further writes, "Overall, the framing effect means that decision results can potentially be altered or manipulated by changing the context of the choice rather than its substance."[92] This is a particularly valuable concept for planners when designing coercive campaigns.

Reference points and risk propensity give planners a starting point from which to estimate the enemy's future actions. When tied to framing, planners can attempt to shape the enemy's view of the conflict to the coercer's benefit. If an enemy views the conflict from a domain of losses with an associated high level of commitment, then a campaign designed to change the enemy's framing could potentially lead him to believe he's changed to the domain of gains. Consequently, his level of commitment may drop as well as decreasing his propensity to risk. Conversely, if decision makers want to force an opponent into risk, planners can attempt to shape the enemy's frame of the conflict to a domain of losses. Once an enemy's reference point

[91] Ibid, 15. Kimminau's information is cited in Jack Levy's "An Introduction to Prospect Theory," *Avoiding Losses/Taking Risks*, 12. According to Kimminau, "The first group had 152 subjects, while the second had 155."
[92] Ibid, 15. Both quotes. (*emphasis* in the original)

and framing are ascertained, it clarifies the next step in the model regarding what is important to the coercee.

Determining an enemy's Center of Gravities and critical vulnerabilities as well as performing a nodal analysis provides planners with pressure points for effective force application. The methods used to determine these points are no different from those of decisive warfare designed to defeat an enemy's ability to resist. An enemy's COGs and vulnerabilities are not solely based on friendly constraints. However, the process that leads up to this point as well as what follows this point is substantially different. First, the constraint filters have shaped what are acceptable targets as well as the friendly capabilities to strike these targets. In current doctrine, with its emphasis on decisive warfare, this is not the case as is graphically shown in Figure 1 of chapter four, where the COG's are determined before or concurrently with constraints. Secondly, in coercive warfare, the enemy's view of the conflict is taken into account, forming a clearer picture of what the enemy values most. Meshed together, these steps provide planners with realistic target sets with clear linkages to effects desired. While still involving some level of uncertainty, these steps illuminate the key components of linkages, constraints, and realistic target sets from both a friendly and enemy perspective.

Targeting Strategy and Force Application

The next step in the model involves a decision. Having ascertained viable COG's, nodes and critical vulnerabilities, matched them to friendly capabilities, and attempted to mitigate friendly vulnerabilities, planners need to present commanders with the best targeting strategy. The term 'best' *does not mean what would* be optimal, but **what is** realistically the most workable option. This will be conflict dependent. Operation Allied Force utilized a combination denial and punishment/decapitation strategy . However, Lt Gen Short believed the best strategy was one emphasizing decapitation and punishment. He may not have been wrong as it has been argued that Milosevic capitulated not because his forces in Kosovo were under attack but because his

infrastructure was collapsing. Nevertheless, NATO was not willing to execute, or initially able to sustain, such a strategy to the level of commitment envisioned by Lt Gen Short. Thus a denial strategy, while not optimal, gained the primacy of effort.

Similarly, a denial strategy worked very well in Operation Deliberate Force. This was due in no small part to the presence of ground troops arrayed against the Bosnian Serbs. Like Operation Allied Force, the constraints placed on Operation Deliberate Force caused the planners to focus on denial targets. Over Bosnia, this strategy was optimal, forcing the Bosnian Serbs to negotiate after only three weeks. This concept of the use of a denial strategy in coercive warfare is the historical lesson incorporated into the model.

The doctrinal lesson incorporated into the model addresses the lack of published guidance that planners faced in developing a less than decisively oriented campaign.[93] Namely, this is the issue of how to operationally apply a workable but less than optimal strategy. Its embodiment comes in the relationship between force application, time and the concept of initiative. Graphically presented as three sequential steps, they are closely related and mutually dependent and almost form a closed loop. Unfortunately, the complexity of coercive warfare, with all its constraints, risks and political commitment fluctuations does not allow for such simplicity. However, in order to understand the relationship amongst these three factors, each is addressed separately as well as corporately.

In attempting to mitigate the disconnect between what *would* be the optimal strategy and what is the *most workable* strategy, the model recommends a high intensity, high tempo campaign of short duration, aimed at feasible leverage points. Operation Deliberate Force is an excellent

[93] For clarification of the lack of doctrinal planning guidance, see the Introduction of Chapter 4, under General Wesley Clark's lessons learned from Operation Allied Force.

example of this concept.[94] Additionally, Group Captain Lambert's writings support this idea when he states,

> Unfortunately, coercion is, like any psychological event, not susceptible to measurement nor can one always have a high degree of confidence in its predictions. It is fraught with uncertainties, both for the coercer and his victim. Indeed many, if not most air campaigns begin in the belief that they can quickly coerce the target group, but the absence of any response seems to suggest that another remedy is required...One example is a psychological blow-a devastating overwhelming shock leaving no room for alternatives-or perhaps a cataclysmic event that provides at its very least a pretext for surrender…"[95]

This attack strategy is based on the accurate assessment of friendly capabilities, commitment, and risk, as well as an accurate assessment of the enemy's domain in and framing of the conflict. Attacks on the **viable** target sets should be carried out with great intensity and tempo over a short period. Not all targets sets merit initial attack, as it is necessary to signal the opponent that greater force can and will be used if necessary. The intent of attacking feasible leverage points is to convince the victim of his vulnerability to attack, the coercer's asymmetric advantages, and the coercer's commitment to a course of action. In reality, a coercer's commitment as well as risk propensity may be low and his asymmetric advantages may be few. However, the intent is psychological, not necessarily reality. This is about coercion not defeat and coercion is primarily a psychological event induced by force.

As soon as these short duration attacks end, the second step of force application occurs. This is the passing of the initiative to the coercee first discussed in the Operation Allied Force chapter. Coercive warfare is seeking a change of behavior and gradual escalation centers on the least amount of force necessary to cause this behavioral change. Therefore, because of its incremental nature, the initiative passes to the coercee as his reaction dictates whether the coercer increases, sustains, or quits his application of force. Simply increasing pressure without allowing

[94] Michael O. Beale, "Bombs Over Bosnia: The Role of Airpower in Bosnia-Herzegovina," Thesis, School of Advanced Airpower Studies, Air University, Maxwell Air Force Base, Alabama: 1996. 61.
[95] Peach, *Perspectives on Air Power*, 289.

the coercee to respond is not attempting coercion but seeking to defeat the enemy. If the coercee does not decide to acquiesce, the coercer faces a decision.

The problem planners face with the decision to sustain or increase pressure is one of perceptions. Is the coercee close to capitulation or does his reaction warrant an increase in force application? The lack of clear feedback mechanisms complicates this problem. Additionally, if the coercee is conducting a successful disinformation campaign, his level of commitment is masked. This is where the shaping operations of framing the conflict comes into critical importance. By using the issue of risk propensity, planners may be able to force the coercee to show his level of commitment. By creating situations where risk is necessary and tying commitment to risk (higher commitment associated with higher risk), planners can get a clearer picture of the coercee's intentions. However, the decision to sustain or increase pressure is not based solely on the coercee. The coercer also shapes the choice.

Specifically, the coercer faces two principal interrelated issues. The first relates to actual force capability, and the second to political constraints and commitment. As discussed earlier, the initial application of force left some target sets or portions of target sets unscathed so that a further application of force remained viable. The idea of a reserve also applies to political resolve. The analysis portion of the model is designed to give planners an understanding of this resolve as a measurable entity. As political commitment is a major constraint on force application, its use is also incremental. Optimally, the level of political commitment rises synergistically with the necessary level of force application. Regardless though, once a decision is made to sustain or increase the application of force, the whole escalatory process begins anew due to the initial failure to coerce the opponent.

Summary

Just like doctrine, this chapter's intent is to provide a model, a starting point for planning a workable, effective JAOP when constraints severely hamper the Air Force's ability to cause

strategic paralysis. In his essay on airpower and coercive warfare, Lambert found ten conclusions, most of which are incorporated into the model and three of which are key to understanding the theoretical foundation of the model. These are:

1. In addition to evaluating a victim's value sets, the coercer must assess the target's expectations.
2. A victim may tolerate considerable pain if he believes victory is within his grasp.
3. To coerce successfully, an assailant needs to apply decisive (high intensity, short period) force which exceeds the victim's expectations.[96]

The first two conclusions are addressed within the enemy as a system sub-heading, while the last conclusion is illustrated in the targeting strategy and force application discussion. All three conclusions provide substance and credibility to the model while not limiting its flexibility.

It bears reiterating that this model is neither comprehensive nor restrictive. It is purely an attempt to address a complex, multi-variable problem while striving to answer more questions than it leaves unanswered. What the model does provide for planners is to highlight the critical areas to focus their efforts. Additionally, it attempts to address the gaps in current Air Force doctrine regarding the planning process for gradual escalation and coercive warfare. By breaking down the planning process into manageable parts, it also provides planners the necessary guidance to design coercive air campaigns.

It should also be understood that this model is not meant to be linear or strictly sequential. As with any complex system, change introduced into any element of the model has the capacity to significantly alter some or all of the other components. Once these other components are altered, the decisions and expected outcomes within the model need readdressing. However, the model does provide planners with focus, both in effort and in areas where change is most likely and yet harder to ascertain. This is particularly true of the enemy's reference point

[96] Peach, *Perspectives on Air Power*, 292.

and framing of the issue. These ‘red flags’ serve to shorten the lag time induced by a lack of feedback mechanisms and the clash of wills inherent in coercive warfare.

CHAPTER 6

THE END RESULTS

> The true measure of a theory is not that it accounts for all the relevant facts but that it accounts for those facts "better than any other theory." Without abstraction and simplification there can be no understanding, Huntington maintained. Those who concentrate on the imperfections of a theory, without coming up with a better alternative, are helping no one.
>
> Robert Kaplan writing in Atlantic Monthly about Samuel Huntington

Introduction

The essential purpose for this monograph is to answer the question of whether Air Force doctrine provides the necessary tools to planners and commanders engaging in gradually escalated, coercive warfare. The conclusion is that doctrine does not offer planning tools for this style of conflict. The implication of this is that the Air Force is not doctrinally prepared to meet certain types of national contingencies, in which the US and its allies use airpower to coerce an opponent versus defeating him outright. This lack of doctrinal guidance forces planners and commanders to adopt ad hoc measures in planning and executing these types of campaigns. While recent coercive conflicts represent victories for the Air Force, their ad hoc nature meant that the planning for these campaigns was not optimized.

This chapter addresses this gap in doctrine by presenting some conclusions about gradual escalation and coercive warfare as well as recommending specific changes to Air Force doctrine. Once again, it bears restating that Air Force doctrine is not broken, it simply needs to close a breach. With that in mind, the conclusions focus on the differences between the decisive warfare espoused heavily in Air Force doctrine, and coercive warfare. More specifically, the conclusions center on key lessons not already addressed within the building of the model in chapter five. The recommendations focus on **how** to plan air campaigns when operating under the constraints of a

gradual escalation policy in a coercive conflict. They do not speak to the **whys** of coercive warfare, which Air Force doctrine, while sporadic and broad, satisfactorily addresses.

Conclusions

The foremost conclusion garnered from the research for this monograph is the belief that a denial strategy, while not necessarily the best option, is often the most optimal strategy in gradually escalated conflicts. Because these conflicts show a marked propensity for avoiding civilian casualties and collateral damage, punishment targets are often heavily restricted, if not outright forbidden. Conversely, attacks on denial targets, both fielded forces and infrastructure targets with clear linkages to fielded forces, are seldom restricted.

Tied to this belief is the requirement for a ground component operating in conjunction with an air component against the coercee. Operation Deliberate Force succeeded quickly because Bosnian Muslims and Croats forced the Serbs to concentrate their ground troops, giving airpower lucrative targets. On the contrary, Operation Allied Force presented no serious threat to the Serbian army in Kosovo. This allowed Milosevic to effectively disperse and protect his troops from air attack. Without a ground presence to force the enemy to concentrate his forces, air attack on fielded forces is extremely difficult. However, a multi-dimensional attack is significantly more difficult to thwart than a one-dimensional assault

The second conclusion is that coercion is extremely difficult. It is decidedly non-linear, iterative, and constantly shifting. This seems obvious but for something that is so difficult, doctrine is silent on how to conduct coercive campaigns. Certainly, decisive warfare exhibits these same characteristics but not to the level found in coercive conflicts. The Prussian military theorist, Carl von Clausewitz, wrote that, "Everything in war is very simple, but the simplest thing is difficult."[97] This concept works well for decisive conflict designed to defeat an enemy. In decisive warfare, force applications are somewhat linear in nature. When fighting to defeat an

[97] Carl von Clausewitz,. *On War,* Edited and translated by Michael Howard and Peter

enemy, the force ratio relationships between opponents have a predictive quality. However, trying to change the mind of another person, which is the essence of coercion, is not a simple thing. Without the capability to read an opponent's mind, judging effects in coercive warfare is a highly uncertain task.

This level of conjecture, inherently greater in coercive warfare, frames the next difference between decisive and coercive air warfare. It centers on the issue of the lack of feedback mechanisms in coercive warfare discussed in chapter three. The struggle for air superiority in conflicts serves to illustrate this point. When air forces clash to achieve air superiority, one of three outcomes occurs, one side is gaining, one side is losing or the struggle is still in question. Feedback to the opposing forces, while at times unclear and/or imperceptible, is nevertheless constant throughout the conflict. However, in coercive warfare, the opponent is limited to two options, quit or continue resisting. If the opponent acquiesces, the feedback is clear. Problems occur when the enemy continues to resist. There are few indicators as to his intentions or will to resist. The level of escalation to bring about coercion is merely speculation. Again, the problem boils down to the inability to accurately assess an opponent's will or intent.

The final conclusion is also about the difficulty in getting inside the opponent's thought processes. It centers on prospect theory's concepts of reference points and framing. These concepts illuminate Milosevic's different reference points concerning Bosnia and Kosovo. NATO leaders at all levels believed that Milosevic would capitulate in Kosovo much the same as he did during Operation Deliberate Force. However, as shown previously, Milosevic was operating in the domain of gains in Bosnia while in Kosovo he was operating in the domain of losses. The conclusion is that NATO leaders, unintentionally mislead by applying a linear concept of past experience tied to the application of force for desired effects, missed the role of psychology in coercive warfare. Air Force doctrine still neglects this key point. The

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Paret, Princeton, NJ: Princeton University Press, 1976. 119.

recommendations listed in the next section address this issue as well as suggest further areas of study.

Recommendations

The recommended change to doctrine presented in this section focuses exclusively on AFDD 2-1, *Air Warfare*. This is due to the focus AFDD 2-1 places on planning air campaigns. AFDD 1, *Basic Doctrine* and AFDD 2, *Organization and Employment of Aerospace Power*, offer only opportunities to change occasional words or sentences, which tend to offer negligible returns. Additionally, unlike AFDD 2-1, the other documents focus more on the why of strategy and not the how. Since the how of coercive warfare is a key theme within this paper and since AFDD 2-1 does concern itself with the how of air warfare, it offers the greatest opportunity for recognizable change.

Within AFDD 2-1, this monograph recommends one major addition. Namely, adding either the model presented in chapter five of this paper, or one of similar intent, to Appendix G, *Additional Planning Tools.* Additionally, some explanation is needed to clarify the concepts presented within the model. In placing the model into Appendix G, which is an assortment of planning models, it gives planners a new tool for planning air campaigns and fills the doctrinal gap concerning planning for coercive air warfare.

Specifically, the recommendation is to insert the model into AFDD 2-1, Appendix G, page 98 with explanatory text on page 99, as well as placing the historical example on page 100. The text on page 99 should read,

1. Receive overall policy and military guidance from higher levels
2. Determine numbers of forces available, friendly strengths and weaknesses in comparison to the enemy
3. List and match constraints to the application of force including but not limited to political constraints, risk inhibitors, political resolve and expected duration of the conflict. This end product is realistic friendly capabilities and vulnerabilities derived from passing strengths and weaknesses through the constraint filters.
4. Determine the reference point of the opponent to determine how the enemy frames the conflict. This allows planners to assess the opponent's propensity for risk and the level of commitment to expect from the enemy. Briefly, the domain of losses means

that the opponent stands to lose something of value in the conflict that is already in the enemy's possession, whether this is prestige, economic resources or territory. The domain of gains means the opponent stands to gain or at least not lose something that would threaten the status quo in which the enemy began the conflict.

5. Analyze the adversary's Center of Gravity's and critical vulnerabilities based on how the enemy views the conflict. These are independent from friendly constraints. However, once they are known, friendly capabilities and constraints can be overlaid and realistic targeting sets chosen.
6. Present higher level commanders with an optimal strategy designed to apply the greatest coercive pressure allowable.
7. Execute the strategy with as much tempo and intensity as feasible.
8. Understand that in gradually escalated conflicts, the initiative for action passes to the opponent after the initial application of force.
9. If the opponent continues to resist, assess the effects of the force application as to whether force should be sustained or escalated.

The final section of this monograph recommends three areas for further study concerning airpower, gradual escalation, and coercion. These are,

1) *Developing Feedback Mechanisms for use in Coercive Warfare* – This involves the creation of ways in which a coercer can assess his effect on the coercee.
2) *How to create synergism amongst all the elements of national power involved in coercing an opponent* – This involves issues of time, force and diplomatic pressure, delineating responsibilities, command and control, and lines of operations.
3) *The application of prospect theory to joint and alliance doctrines* – Specifically, do the concepts of prospect theory apply outside of coercive air warfare?

These are just three of a broad range of topics on the issue of coercive warfare. It is hoped that they will help future authors focus their efforts. The relevance of coercive warfare and airpower is growing not diminishing. As General Joseph Ralston, then Vice Chairman of the Joint Chiefs of Staff, said in his speech to the Air Force Association Policy Forum in 1999,

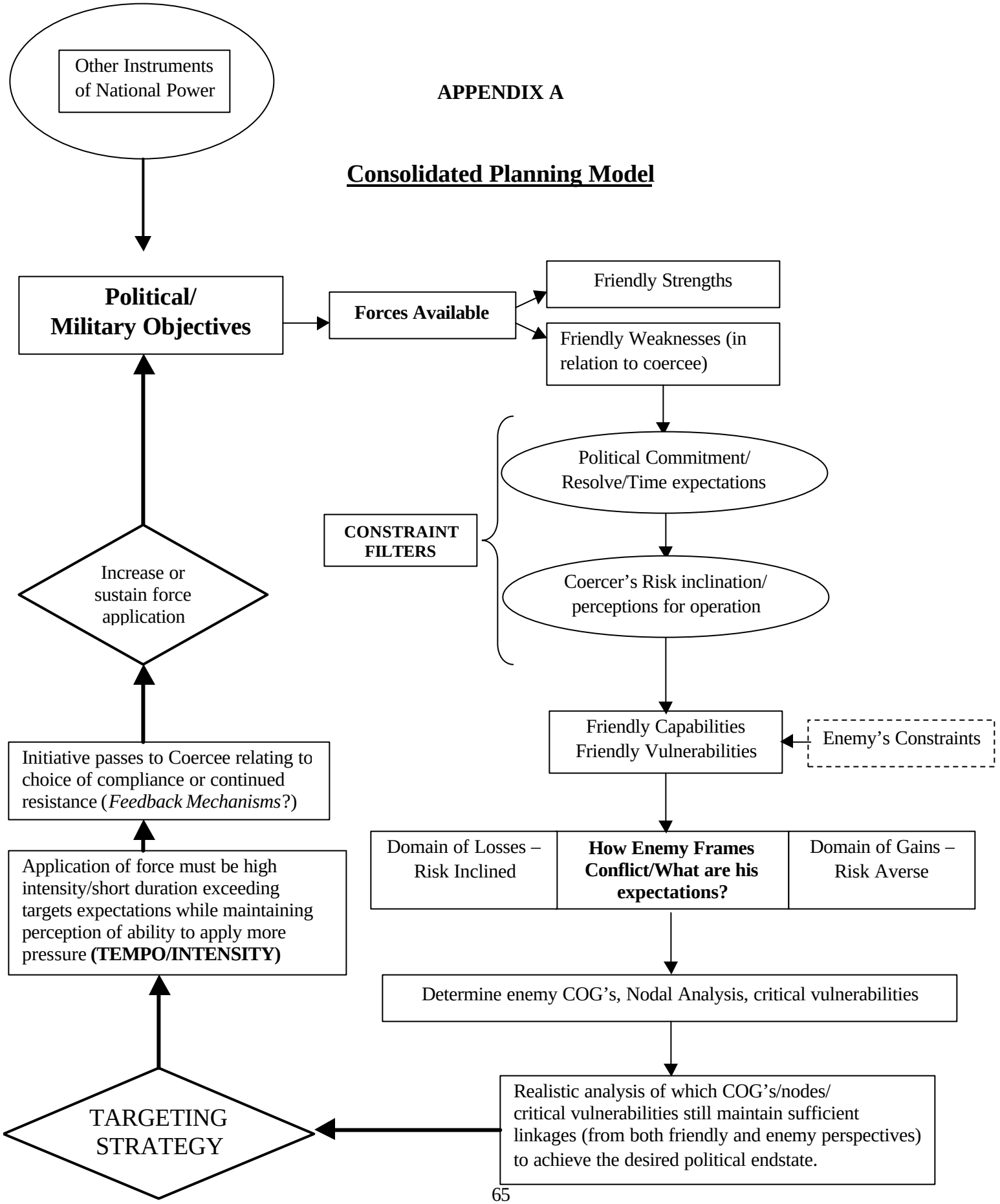
"Yet, when the political and tactical constraints imposed on air leaders are extensive and pervasive-and that trend seems more rather than less likely-then gradualism may be perceived as the only option. Whether we like it or not, a measured and steadily increasing use of airpower

against an opponent may be one of the options for future war. If this is an option, then it is our obligation to optimize the tools we use to achieve success."[98]

[98] Ralston, Address to the Air Force Association Policy Forum, 5

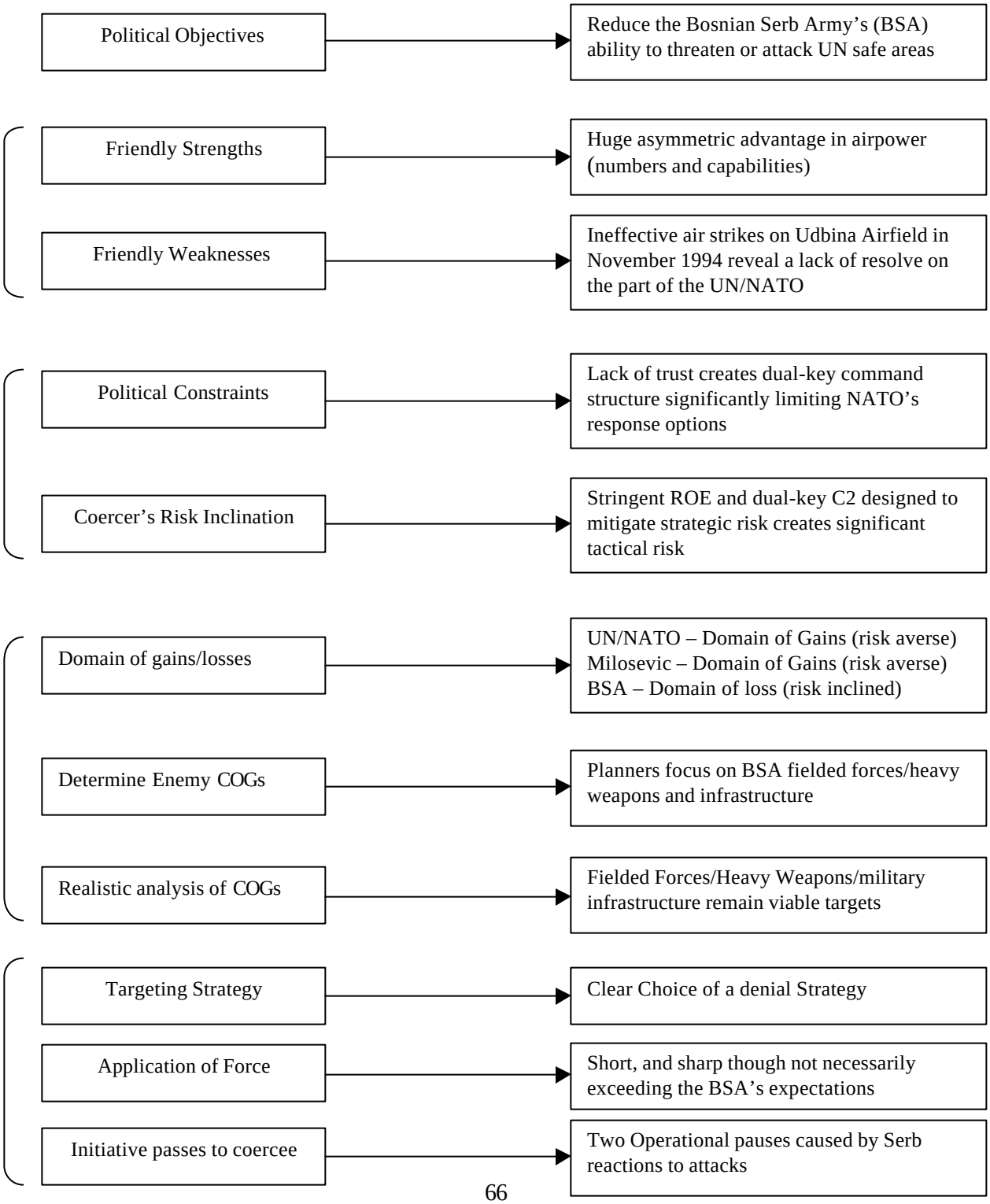
APPENDIX A

Consolidated Planning Model



APPENDIX B

Operation Deliberate Force Applied to the Model



BIBILOGRAPHY

Books/Monographs/Theses

Beale, Michael O. "Bombs Over Bosnia: The Role of Airpower in Bosnia-Herzegovina." Thesis, School of Advanced Airpower Studies, Air University, Maxwell Air Force Base, Alabama: 1996

Brodie, Bernard. *War and Politics.* New York: MacMillan Publishing Co., 1973.

Buchan, Alastair. *Crisis Management: The New Diplomacy*. Paris: The Atlantic Institute, April, 1966.

Builder, Carl H. *The Masks of War: American Military Styles and Strategy and Analysis.* Baltimore, Md.: Johns Hopkins University Press, 1989.

Clausewitz, Carl von. *On War*. Edited and translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1976.

Douhet, Giulio. *Command of the Air.* Translated by Dino Ferrari. Washington, D.C.: Air Force History and Museums Program, 1998.

Edwards, Lennie O., Jr. "Air Battle Force: Air Force Support for Contingency Operations." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas: 1990.

Fadok, David S. *John Boyd and John Warden: Air Power's Quest for Strategic Paralysis.* Maxwell AFB, Ala.: Air University Press, 1995.

Francis, William W. II, "Coercive Air Strategy in Post-Cold War Peace Operations." Thesis, School of Advanced Airpower Studies, Air University, Maxwell Air Force Base, Alabama: 1999

Freedman, Lawrence, ed. *Strategic Coercion: Concepts and Cases.* Oxford: Oxford University Press, 1998.

Gaddis, John Lewis. *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy*. New York: Oxford University Press, 1982.

George, Alexander L. and William E. Simons, editors. *The Limits of Coercive Diplomacy.* 2d. ed. Boulder, Colo.: Westport Press, 1994.

Hall, R. Cargill., ed. *Case Studies in Strategic Bombardment.* Washington, D.C.: U.S. Government Printing Office, 1998.

Harmer, Todd P. "Enhancing the Operational Art: The Influence of the Information Environment on the Command-And-Control of Airpower." Thesis, School of Advanced Airpower Studies, Air University, Maxwell Air Force Base, Alabama: 2000.

Huggins, Peter W., "Airpower and Gradual Escalation: Reconsidering the Conventional Wisdom." Thesis, School of Advanced Airpower Studies, Air University, Maxwell Air Force Base, Alabama: 2000.

Hunt, Peter C., "Coalition Warfare: Considerations for the Air Component Commander." Thesis, School of Advanced Airpower Studies, Air University, Maxwell Air Force Base, Alabama. 1996.

Jakobsen, Peter Viggo. *Western Use of Coercive Diplomacy After the Cold War*. New York: St. Martin's, 1998.

Jervis, Robert. *Perceptions and Misperceptions in International Politics*. Princeton, N.J.: Princeton University Press, 1976.

Kahn, Herman. *On Escalation: Metaphors and Scenarios*. New York: Frederick A. Praeger, 1965.

Kimminau, Jon A. "The Psychology of Coercion: Merging Airpower Theory and Prospect Theory." Thesis, School of Advanced Airpower Studies, Air University, Maxwell AFB, Al.: 1998.

Lambeth, Benjamin S, *NATO's Air War for Kosovo: A Strategic and Operational Assessment*. Santa Monica, CA.: RAND, 2001.

_____. *The Transformation of American Air Power*. Ithaca, N.Y.: Cornell University Press, 2000.

Lambert, Group Captain A. P. N., RAF. *The Psychology of Air Power*. London: Royal United Services Institute for Defense Studies, 1995.

Mason, Air Vice Marshall R. A., ed. *War in the Third Dimension: Essays in Contemporary Air Power*. London: Brassey's Defence Publishers, 1986.

Mason, AVM Tony. *Air Power: A Centennial Appraisal*. London: Brassey's, 1994.

Maxwell, Barry A. "Establishing Theater Command and Control in a Coalition of Nations: Requirements for U.S. Doctrine." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas: 1992.

Medve, John P. "Changing Attitudes and Changing Latitudes: The Impact of Changes in the Strategic Environment on Tactical Doctrine." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas: 1993.

Meilinger, Col Phillip S., ed. *The Paths of Heaven: The Evolution of Airpower Theory*. Maxwell AFB, Alabama: Air University Press, 1997.

Miller, Kurt F. "Deny Flight and Deliberate Force: An Effective Use of Airpower?" Master's Thesis, U.S. Command and General Staff College, Fort Leavenworth, Kans.: 1997.

Mitchell, William. *Winged Defense: The Development and Possibilities of Modern Air Power--Economic and Military*. New York: Dover Publications, Inc., 1988.

Owen Col Robert C., ed. USAF *Deliberate Force: A Case Study in Effective Air Campaignin*g. Maxwell AFB, Ala.: Air University Press, 2000.

Pape, Robert A. *Bombing to Win: Air Power and Coercion in War.* Ithaca, N.Y.: Cornell University Press, 1996.

Peach, Stuart., ed. *Perspectives on Air Power.* London: Defence Studies (Royal Air Force), Joint Services Command Staff College Bracknell. 1998.

Pellegrini, Lt Col Robert P. *The Links between Science, Philosophy, and Military Theory: Understanding the Past, Implications for the Future.* Maxwell AFB, Ala.: Air University Press, August 1997.

Ripley, Tim. *Operation Deliberate Force: The UN and NATO Campaign in Bosnia 1995*. Lancaster, U.K.: Center for Defence and International Security Studies, 1999.

Rosen Stephen Peter. *Winning the Next War: Innovation and the Modern Militar*y. Ithaca, N.Y.: Cornell University Press, 1991.

Schelling, Thomas C. *Arms and Influence.* New Haven, Conn.: Yale University Press, 1966.

_____. *The Strategy of Conflict.* Cambridge, Mass.: Harvard University Press, 1960.

Soucy, Robert R., II. "Serial vs. Parallel War: An Airman's View of Operational Art." Monograph, School of Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas: 1993.

Strange, Dr. Joe. *Centers of Gravity & Critical Vulnerabilities: Building on the Clausewitzian Foundation so That We Can All Speak the Same Langua*ge. 2nd Ed., Quantico, Virginia: Marine Corps University Foundation, 1996.

Thompson, James Clay. *Rolling Thunder: Understanding Policy and Program Failure.* Chapel Hill, N.C.: University of North Carolina Press, 1980.

Warden, Col John A. III. *The Air Campaign: Planning for Combat.* Washington D.C.: Brassey's, 1989.

Watts, Barry D. *The Foundations of U.S. Air Doctrine: The Problem of Friction and War*. Maxwell Air Force Base, Ala.: Air University Press, 1984.

Weigley Russell F. *The American Way of War: A History of American Military Strategy and Policy.* Bloomington, Ind.: Indiana University Press, 1973.

Documents and Publications

Air Force Doctrine Document (AFDD) 1. *Air Force Basic Doctrin*e, September 1997.

Air Force Doctrine Document (AFDD) 2, *Organization and Employment of Aerospace Power.* 17 February 2000.

Air Force Doctrine Document (AFDD) 2-1. *Air Warfare*, 22 January 2000.

Cleveland, Harlan. "Crisis Diplomacy." *Foreign Affairs* 41, no. 4 (July 1963): 638-649.

Cooper, Scott. "The Politics of Airstrikes." *Policy Review*, no. 107 (June 2001)

Fracker, Martin L. "Psychological Effects of Aerial Bombardment." *Airpower Journal* 6, no. 3 (Fall 1992): 56-68.

Frisbee, John L. "The Practice of Professionalism." *Air Force Magazine* 69, no. 8 (August 1986): 113.

Grant, Rebecca. *The Kosovo Campaign: Aerospace Power Made it Wor*k. Arlington, VA. The Air Force Association. September 1999.

Halberstrom, David. "Clinton and the Generals." *Vanity Fair* (September 2001): 230-243.

Meilinger, Col Phillip S. "A Matter of Precision." *Foreign Policy Magazine* (March – April 2001): 1-3.

_____. "Gradual Escalation." *Armed Forces Journal International* (October 1999): 18.

Morrocco, John D. "Bombing Compels Serb Withdrawal." *Aviation Week and Space Technology.* September 25, 1995.

Milburn, Thomas W. "What Constitutes Effective Deterrence?" *Journal of Conflict Resolution* 3, no. 2 (1959): 138-145.

Owens, Robert C. Col. "Balkans Air Campaign Study, pt. 1" *Airpower Jou*rnal. vol. 11, no. 2, (Summer 1997): 4-24.

Owens, Robert C. Col. "Balkans Air Campaign Study, pt. 2" *Airpower Jou*rnal. vol. 11, no. 3, (Fall 1997): 6-26.

Schmitt, Lt Col Michael N. "Identifying National Objectives and Developing Strategy: A Process Oriented Approach." *Strategic Review* 25, no. 1 (Winter 1997): 24-37.

Stephens, Alan. *Kosovo, Or the Future of War.* RAAF Fairbairn, Australia: Air Power Studies Center, August 1999.

Simmons, Dean. Phillip Gould, Verena Vomastic, and Col Phillip Walsh. "Air Operations Over Bosnia." *Proceedings*. vol. 123. no. 5. (May 1997): 58-63.

Strickland, Paul C. Lt Col. "USAF Aerospace Power Doctrine: Decisive or Coercive". *Airpower Journal.*

Tirpak, John A. "Deliberate Force." *Air Force Magazine*. vol 80, no.10 (October 1997): 36-43.

U.S. Congress. Senate. Committee on Armed Services. Lessons Learned From Military Operations and Relief Efforts in Kosovo. 21 October 1999.

U.S. Department of Defense. *Kosovo/Operation Allied Force After-Action Report*, by Secretary of Defense William S. Cohen and Chairman of the Joint Chiefs of Staff Henry H. Shelton. Report to Congress. 31 January 2000.

Walker, Scott Major, "A Unified Theory of Coercive Airpower." *Airpower Journal* 11, no. 2 (Summer 1997): 70 – 79.

Warden, Col John A., III. "The Enemy as a System." *Airpower Journal* 9, no. 1 (Spring 1995): 40-55.

Waxman, Matthew C. "Coalitions and Limits on Coercive Diplomacy." *Strategic Review* 25, no. 1 (Winter 1997): 38-47.

Speeches

Dulles, John Foster. "The Evolution of Foreign Policy." *The Department of State Bulletin*, January 25, 1954.

Kissinger, Dr. Henry A. "H.B. Johnson Jr. '26 Distinguished Leadership Lecture Series," Address to the Staff, Faculty and Cadets of the Virginia Military Institute, Lexington, Va. 10 October 2001.

Mason, AVM Tony. "Operation Allied Force: Strategy, Execution, Implications." Address to the Eaker Institute for Aerospace Concepts, Washington D.C., 16 August 1999.

Ralston, Gen Joseph W. Vice Chairman, Joint Chiefs of Staff. "Aerospace Power and Military Campaigns." Address to the Air Force Association Policy Forum, 14 September 1999.

Short, Lt. Gen Michael R., "Operation Allied Force." Address to the U.S. Army Command and General Staff Officer College, 05 September 2000

Internet Resources

"Statement on Kosovo Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Washington D.C. on 23 and 24 April 1999. *Basic European Security Upd*ate. Available online at http://www.basicint.org/natosum10-13.htm. Accessed 02 Feb 02.

Butcher, Martin, Tanya Padberg and Julie Smith. "NATO: No plans to Change Strategy in Kosovo, but Forced to Act to Contain Conflict." *Basic European Security Update*. Available online at http://www.basicint.org/natosum10-16.htm. Accessed 02 Feb 02.

Cooper, Scott A. "The Politics of Airstrikes." *Policy Review.* Available online at http://policyreview.org/jun01/cooper_print.html. Accessed 04 Mar 02.

Daalder, Ivo H. and Michael O'Hanlon. "Unlearning the Lessons of Kosovo." *Foreign Policy*, Fall 1999. Available online http://www.brook.edu/views/articles/daalder/19990920FP.htm. Accessed 24 Dec 2001.

"Operation Deliberate Force Fact Sheet." Allied Forces Southern Europe. Available online http://www.fas.org/man/dod-101/ops/docs/DeliberateForceFactSheet.htm. Accessed 21 Feb 2002.

Sopko, Mark G. Maj. "Combat Assessment: Analyzing the Results of an Air Campaign." Nov. 1999. Available online http://www.airpower.maxwell.af.mil/airchronicles/cc/sopko.html Accessed 21 Feb 2002.